AMAZING STORIES

JULY
25 Cents

THIA OF THE DRYLANDS, by Harl Vincent

Other Scientific Fiction by:

Francis Flagg, David H. Keller, M.D., J. Lewis Burtt

WALTER HINTON

Get on AVIATION'S PAYROLL!

$75 a Week for Dobbins!

My graduate, R. N. Dobbins, got a job immediately after finishing my course. Now he's earning $75 a week as Chief Instructor at a big Aviation School in New York!

Let Me Show You How to

EARN $60 to $100 a Week and UP in AVIATION!

My up-to-date home study Course gives you the ground work you need to *get and keep a real job* in this fascinating, fast growing industry. Scores of my graduates, who didn't know a thing about Aviation a few months ago, are holding down fine jobs right now—in the air and on the ground. *Over forty different types of jobs to choose from,* once you have this necessary training. Get the facts about my practical training, free Employment Service and Money-Back Agreement NOW!

Walter Hinton

First to fly the Atlantic; first to fly to South America; first to explore the upper regions of the Amazon by plane. Flying Instructor in Navy for five years. Now giving ambitious men **practical ground work training in Aviation at home.** If you are 18 or over, mail the coupon below for your copy of his big new FREE Book today.

I Teach You QUICKLY—at Home in Your Spare Time

You don't need to give up your present job—don't need to leave home, to get your training in Aviation. I've made it easy for you. I've put my own fifteen years of experience—backed by over 400,000 miles of flying—five years of instructing in the Navy—all into my thorough, quickly mastered home study Course.

No Previous Experience Needed

You don't even need a high school education—don't have to know anything about planes or engines to learn the ground work of Aviation with my Course. Everything is clearly explained—illustrated by hundreds of pictures, drawings and charts—made as simple and easy as possible. You get all the information you need to pass the Government's written examinations for Mechanic's or Pilot's Licenses, in a few short months. If you want to learn to fly, I can save you many times the cost of my Course on your flying time at good airports all over the country.

FREE Airplane Ride!

Right now I'm making an offer of a free airplane ride to all of my students. Write me at once and I'll send you complete information. Act now—to get in on this fine offer—while it is still open!

I'll Help You Get a Job

My nation-wide Employment Department is at your service—the minute you are qualified to accept a job in Aviation. We are constantly in touch with scores of airports, plane factories, etc., that want trained men for good jobs paying from $40 to $100 a week. No extra charge to graduates for this extra service. Free Book tells all about how I help my graduates get the kind of jobs they want! Mail the coupon now.

Wings of Opportunity

There's No Time To Lose—Get My FREE Book NOW!

Aviation is growing by leaps and bounds—while many other industries are slumping. Don't wait and let the other fellows get ahead of you. Think about your own future. Let me prepare you for a job paying $60 to $100 a week or more—in Aviation. Get the FACTS. Mail the handy coupon on the right today—right now—while you're thinking about it. I'll send you my big new FREE Book—packed with interesting facts about **your opportunities in Aviation. Mail coupon NOW.**

WALTER HINTON, President
Aviation Institute of U. S. A., Inc.
1115 Connecticut Ave., Washington, D. C.

Mail for my big FREE BOOK on AVIATION NOW!

Walter Hinton, President, 675-P
Aviation Institute of U. S. A., Inc.
1115 Connecticut Avenue, Washington, D. C.

Please send me a Free copy of your book, "Wings of Opportunity," telling all about my opportunities in Aviation, how you will train me at home and help me get a job.

Name ....
(Print clearly)

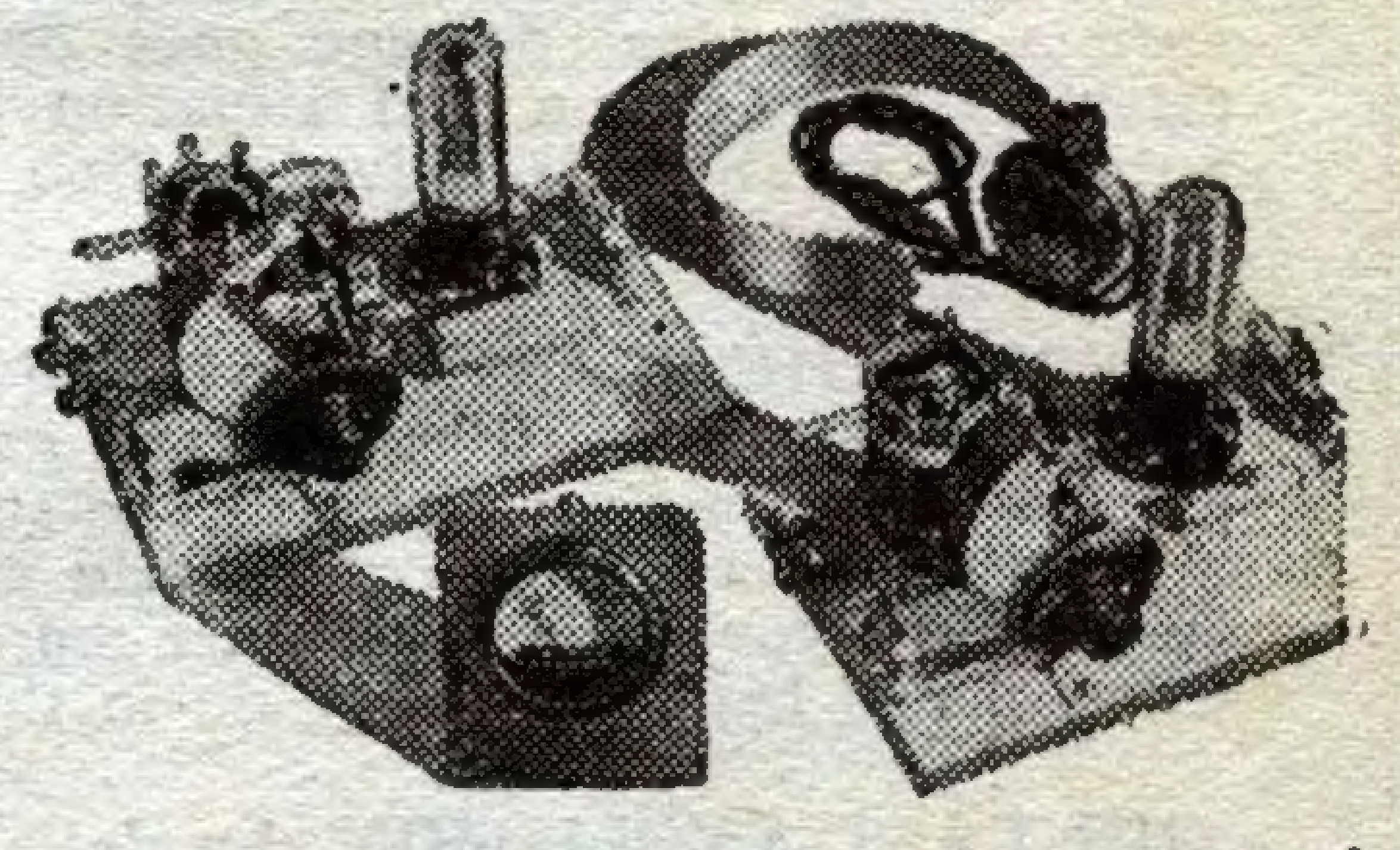
Address .... Age ....
(Must be 18 or over)

City .... State ....

I will train you at home to fill a BIG PAY Radio Job!

.. NEW Radio Equipment for Broad Practical Experience *Given Without Extra Charge*

With the aid of this equipment you can work out with your own hands many of the things you read in our text books. From it you get the valuable experience that tells an expert from a beginner. In a short time you have learned what it would take years to learn in the field. It's training like this that puts the extra dollars in your pay envelope. Some of the many circuits you build and experiments you perform are: Measuring the merit of a Tube, building an Ohmmeter, tube voltmeter, and a Grid dip meter for service work. You actually make experiments illustrating the important principles in the 25 best known sets.



Apparatus for transmission and reception of an actual radio signal—one of the many experiments set up with my outfits.

Here's Proof

$100 a week

"My earnings in Radio are many times greater than I ever expected they would be when I enrolled. They seldom fall under $100 a week. If your course cost four or five times more I would still consider it a good investment."

E. E. WINBORNE
1267 W. 48th St.,
Norfolk, Va.

Jumped from $35 to $100 a week

"Before I entered Radio I was making $35 a week. Last week I earned $110 servicing and selling Radios. I owe my success to N. R. I. You started me off on the right foot."

J. A. VAUGHN
Grand Radio & App. Co.,
3107 S. Grand Boulevard,
St. Louis, Mo.

$500 extra in 6 months

"In looking over my records I find I made $500 from January to May in my spare time. My best week brought me $107. I have only one regret regarding your course—I should have taken it long ago."

HOYT MOORE
R. R. 3, Box 919,
Indianapolis, Ind.

If you are dissatisfied with your present job, if you are struggling along in a rut with little or no prospect of anything better than a skinny pay envelope—clip the coupon NOW. Get my big FREE book on the opportunities in *Radio*. Read how quickly you can learn at home in your spare time to be a Radio Expert—what good jobs my graduates have been getting—real jobs with real futures.

Free Book Tells How Mail Coupon!

Many Radio Experts Make $50 to $100 a Week

In about ten years the Radio Industry has grown from $2,000,000 to hundreds of millions of dollars. Over 300,000 jobs have been created by this growth, and thousands more will be created by its continued development. Many men and young men with the right training—the kind of training I give you in the N. R. I. course—have stepped into Radio at two and three times their former salaries.

Get Ready Now for Jobs Like These

Broadcasting stations use engineers, operators, station managers, and pay up to $5,000 a year. Manufacturers continually employ testers, inspectors, foremen, engineers, service men, buyers, for jobs paying up to $6,000 a year. Radio Operators on ships enjoy life, see the world, with board and lodging free, and get good pay besides. Dealers and jobbers employ service men, salesmen, buyers, managers, and pay up to $100 a week. My book tells you about these and many other kinds of interesting radio jobs.

Many N. R. I. Men Have Made $200 to $1000 in spare time while learning

The day you enroll with me I send you material which you should master quickly for doing 28 jobs common in most every neighborhood, for spare-time money. Throughout your course I send you information on servicing popular makes of sets! I give you the plans and ideas that have made $200 to $1,000 for N. R. I. students in their spare time while studying. My course is famous as the course that pays for itself.

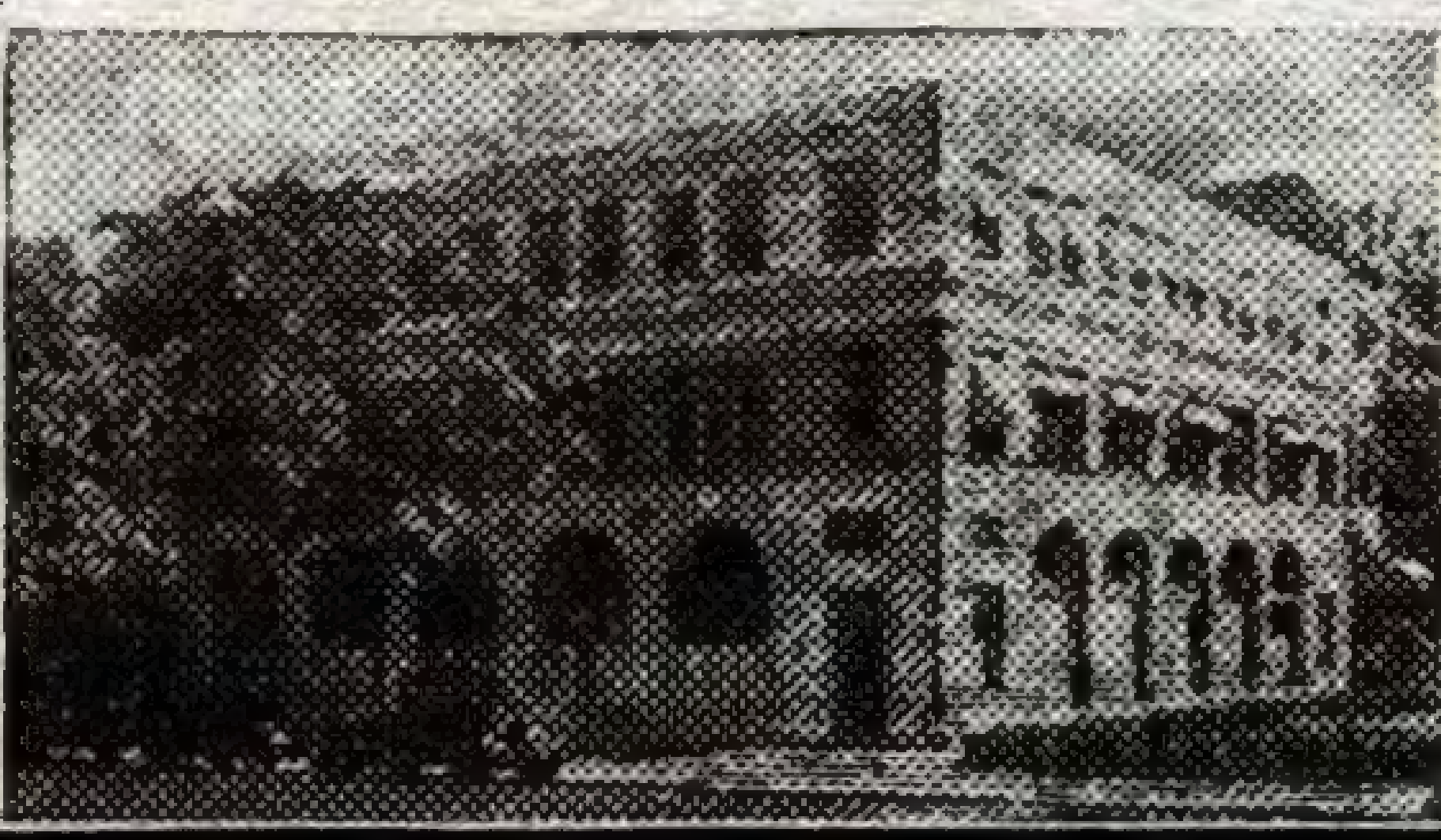
Talking Movies, Television, Aircraft Radio Included

Special training in Talking Movies, Television and Home Television experiments, Radio's use in Aviation, Servicing and Merchandising Sets, Broadcasting, Commercial and Ship Stations are included. I am so sure that N. R. I. can train you satisfactorily that I will agree in writing to refund every penny of your tuition if you are not satisfied with my Lesson and Instruction Service upon completion.

64-page book of information FREE

Get your copy today. It tells you where Radio's good jobs are, what they pay, tells you about my course, what others who have taken it are doing and making. Find out what Radio offers you without the slightest obligation. ACT NOW!

J. E. SMITH, President
National Radio Institute Dept. 2-GS
Washington, D. C.



Our Own Home

Pioneer and World's Largest Home-Study Radio training organization devoted entirely to training men and young men for good jobs in the Radio industry. Our growth has paralleled Radio's growth. We occupy three hundred times as much floor space now as we did when organized in 1914.

Lifetime Employment Service to all Graduates

I have doubled and tripled the salaries of many. Find out about this tested way to BIGGER PAY

RICH REWARDS IN RADIO

Get a Job with a Future

FILL OUT AND MAIL THIS COUPON TODAY

J. E. SMITH, President
National Radio Institute, Dept. 2-GS
Washington, D. C.

Dear Mr. Smith: Send me your free book. I understand this request does not obligate me.

Name..

Address..

City..............................*State*..................

JULES VERNE'S TOMBSTONE AT AMIENS
PORTRAYING HIS IMMORTALITY

AMAZING STORIES

Scientific Fiction

Vol. 7 **July, 1932** **No. 4**

In Our Next Issue

THE SWORDSMAN OF SARVON, by Charles Cloukey. (A Serial in three parts) Part I. We have advanced scientifically and mechanically within the last fifty years beyond even the wildest conceptions of the most visionary scientist dreamers. It would probably be just as strange a shock to a person of the 20th century to find himself suddenly fifty years hence, as it would have been if a man who has lived to see the advancement of civilization up to fifty years ago should suddenly wake up to find himself in this day and age. Charles Cloukey's serial is not only chock full of science, it is thoroughly logical, vivid and plausible.

THE PURPLE MONSTERS, by Bob Olsen. While noted scientists argue the pros and cons of cosmic phenomena, damage goes on apace, for, after all, how can a bad situation be remedied until the mystery is solved? Bob Olsen once more proves the exception.

BEYOND THE PLANETOID, by Edwin K. Sloat. Who wouldn't find it thrilling to get mixed up with two opposing pirate gangs and somehow outwit both and even make the world at least temporarily safe for space travel once more—especially when things happen as they do in this story?

THE LAST EVOLUTION, by John W. Campbell, Jr. Here is something entirely new by our already famous author of interplanetary stories. Our young author knows his science and he can apply it just as effectively in this type of story as in the others. This story is short, but it is excellent scientific fiction that will give you plenty to think about.

ROOM FOR THE SUPER RACE, by Walter Kateley. "It all depends upon what side of the fence you're on" is very cleverly proved a truism by the author of "The Hollister Experiment" and other narratives published from time to time in AMAZING STORIES. Yet, in each case, the judge might be just as honest and sincere in his decision. Could Einstein explain it in terms of relativity?

And other unusual science fiction

In Our July Issue

Thia of the Drylands
By Harl Vincent........................... 296
Illustrated by Morey

North of Matto Grosso
By Bertrand L. Shurtleff........................ 310
Illustrated by Morey

The Metal Doom
(A Serial in three parts) Part III
By David H. Keller, M.D.................... 330
Illustrated by Morey

The Lemurian Documents
No. 5: The Sacred Cloak of Feathers
By J. Lewis Burtt............................ 338
Illustrated by Morey

The Resistant Ray
By Francis Flagg........................... 346
Illustrated by Morey

Sheridan Becomes Ambassador
By Warren E. Sanders...................... 356
Illustrated by Morey

What Do You Know?
(Science Questionnaire)......................... 369

Omega
By Ameilia Reynolds Long.................... 370
Illustrated by Morey

Discussions 376

Our Cover

this issue depicts a scene from the story entitled, "Thia of the Drylands," by Harl Vincent, in which the Secret Service Men from Earth are getting the information they seek, by the very effective means of a form of hypnotism, while they are all *en route* in the ronsals of Mars.

Cover Illustration by Morey

Published Monthly by Teck Publishing Corporation, *Washington and South Avenues, Dunellen, N. J.*
EDITORIAL AND EXECUTIVE OFFICES
350 HUDSON STREET, NEW YORK CITY, N. Y.

OFFICERS
Lee Ellmaker, *President*
Warren P. Jeffery } *Vice Presidents*
Huston D. Crippen }
William Thompson, *Treasurer*
Wesley F. Pape, *Secretary*

Entered as second class matter at the Post Office at Dunellen, N. J., under the act of March 3, 1879. Copyright, 1932, by Teck Publishing Corporation. All rights reserved. Title Registered at the U. S. Patent Office. Printed in the United States of America. The contents of this magazine must not be reproduced without permission. We cannot be responsible for lost manuscripts, although every care is taken for their safety.

25c a Copy, $2.50 a year, $5.00 in Canada, $3.50 in Foreign Countries. Subscribers are notified that change of address must reach us five weeks in advance of the next date of issue.

"HERE'S A REAL

job-insurance policy!"

International Correspondence Schools
Diploma

"THE boss called me in today and said, 'Fred, as you know, we have been laying some men off around here. The reason I am telling you this is that you, too, were on the list to go. But when I received notice that you had completed a course of home study, I figured a man that is anxious to make good deserved recognition. I'm appointing you as my assistant!'

"Believe me, this diploma from the International Correspondence Schools is real job-insurance."

If you want to make progress, even hold the job you've got, it's necessary to have *training* — the mental-equipment to do things better than the next man. I. C. S. can help you. Mail the coupon!

INTERNATIONAL CORRESPONDENCE SCHOOLS

"The Universal University" BOX 5787-B, SCRANTON, PENNA.

★ Without cost or obligation, please send me a copy of your booklet, "Who Wins and Why," and full particulars about the subject *before* which I have marked X: ★

TECHNICAL AND INDUSTRIAL COURSES

☐ Architect
☐ Architectural Draftsman
☐ Building Estimating
☐ Wood Millworking
☐ Contractor and Builder
☐ Structural Draftsman
☐ Structural Engineer
☐ Electric Wiring
☐ Electrical Engineer
☐ Electric Lighting
☐ Welding, Electric and Gas
☐ Reading Shop Blueprints
☐ Telegraph Engineer
☐ Telephone Work
☐ Mechanical Engineer
☐ Mechanical Draftsman
☐ Machinist ☐ Toolmaker
☐ Patternmaker
☐ Pipefitter ☐ Tinsmith
☐ Bridge Engineer
☐ Bridge and Building Foreman
☐ Gas Engines
☐ Diesel Engines
☐ Aviation Engines
☐ Automobile Mechanic
☐ Plumbing ☐ Steam Fitting
☐ Heating ☐ Ventilation
☐ Sheet Metal Worker
☐ Steam Engineer
☐ Steam Electric Engineer
☐ Civil Engineer
☐ Surveying and Mapping
☐ Refrigeration
☐ R. R. Locomotives
☐ R. R. Section Foreman
☐ Highway Engineering
☐ R. R. Bridge and Building Foreman
☐ Air Brakes
☐ Train Operation
☐ Chemistry ☐ Pharmacy
☐ Coal Mining Engineer
☐ Navigation ☐ Boilermaker
☐ Textile Overseer or Supt.
☐ Cotton Manufacturing
☐ Woolen Manufacturing
☐ Fruit Growing ☐ Agriculture
☐ Poultry Farming
☐ Radio ☐ Marine Engineer

BUSINESS TRAINING COURSES

☐ Business Management
☐ Office Management
☐ Industrial Management
☐ Personnel Management
☐ Traffic Management
☐ Accountancy
☐ Cost Accountant
☐ C. P. Accountant
☐ Bookkeeping
☐ Secretarial Work
☐ Spanish ☐ French
☐ Salesmanship
☐ Advertising
☐ Business Correspondence
☐ Lettering Show Cards
☐ Signs
☐ Stenography and Typing
☐ Complete Commercial
☐ Civil Service ☐ Mail Carrier
☐ Railway Mail Clerk
☐ Grade School Subjects
☐ High School Subjects
☐ College Preparatory
☐ Illustrating ☐ Cartooning
☐ Lumber Dealer

Name..............................*Age*..............*Address*..............................
City..............................*State*..............*Occupation*..............................

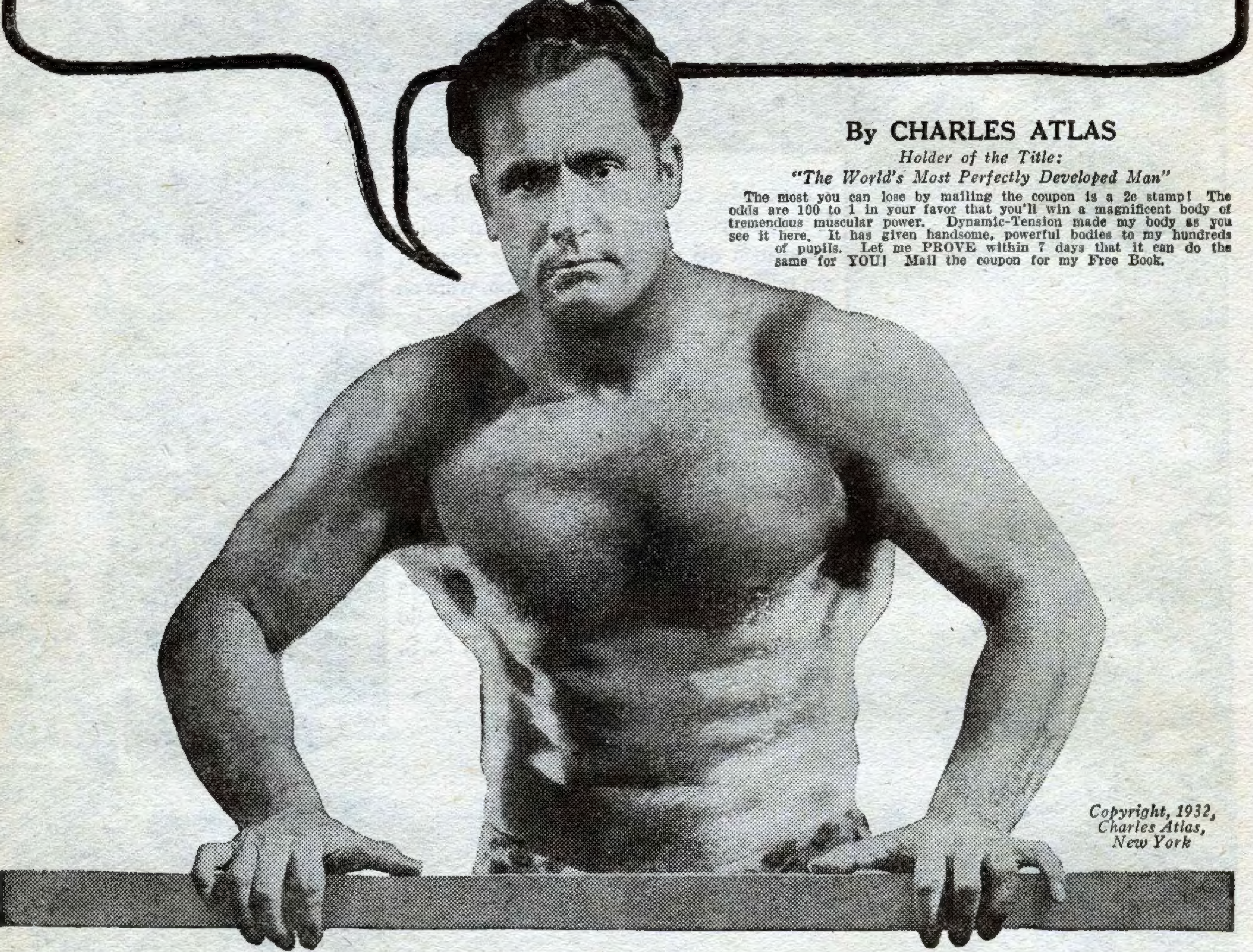
If you reside in Canada, send this coupon to the International Correspondence Schools Canadian, Limited, Montreal, Canada

Would YOU Gamble 2¢ to Win a Body like Mine?

By CHARLES ATLAS

Holder of the Title:
"The World's Most Perfectly Developed Man"

The most you can lose by mailing the coupon is a 2c stamp! The odds are 100 to 1 in your favor that you'll win a magnificent body of tremendous muscular power. Dynamic-Tension made my body as you see it here. It has given handsome, powerful bodies to my hundreds of pupils. Let me PROVE within 7 days that it can do the same for YOU! Mail the coupon for my Free Book.



Copyright, 1932,
Charles Atlas,
New York

HOW does your body stack up against mine? Will you give me a chance to PROVE that my method, Dynamic-Tension, will do for you what it has done for me and hundreds of my pupils?

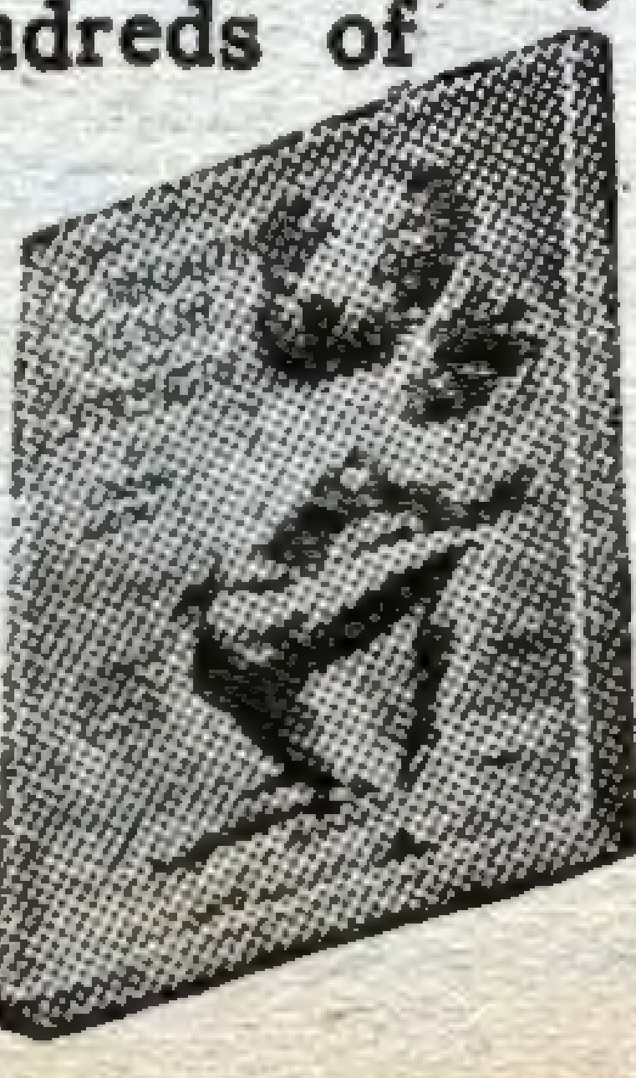
I'm so sure of what Dynamic-Tension can do that I can make you an Offer which other Physical Instructors don't DARE to make. I agree to show you definite results *in 7 days, to give* you conclusive PROOF *within a week* that I can transform you, too, into this NEW MAN of mighty energy and strength.

I used to weigh only 97 pounds. I was sick more than half the time. Then I discovered Dynamic-Tension. This system changed me from a weakling into the man who was acclaimed in two international contests as "The World's Most Perfectly Developed Man."

My *Dynamic-Tension* method works hand in hand WITH Nature. There's nothing artificial, about it, no pills, special foods, or any tricky apparatus that may strain your heart and other vital organs.

"Everlasting Health and Strength"—FREE

Let me tell you all about it in my free book. You can win a body like mine, as my hundreds of pupils have done—by risking only a 2c stamp to mail the coupon for my free book! Fill in the coupon right now and send it to me personally, CHARLES ATLAS, Dept. 10W, 133 East 23rd St., New York City.



CHARLES ATLAS,
Dept. 10-W, 133 East 23rd
Street, New York City.

I want the proof that your system of Dynamic-Tension will make a New Man of me—give me a healthy, husky body and big muscle development. Send me your free book "Everlasting Health and Strength."

Name ....
(Please print or write plainly)

Address ....

City ....

State ....

To add 50,000 NEW CUSTOMERS

America's Largest MAIL ORDER *Credit Jewelers*
OFFER THE
MOST SENSATIONAL VALUES
EVER ATTEMPTED IN GENUINE DIAMONDS & FINE JEWELRY

Our goal is 50,000 new customers — 50,000 more jewelry buyers to whom we can demonstrate that our tremendous purchasing power and direct sales methods enable us to offer values which defy local cash or credit competition anywhere! That's why we have slashed prices so daringly on these fine quality and very popular items.

AND YOU NEED NOT PAY CASH!

We offer you credit accommodation without the slightest embarrassment,—no red tape—no delay, no interest, no extra charges. Simply send $1.00 and your name and address. We ship prepaid. **No C. O. D. to pay upon arrival. All dealings strictly confidential.**

10 Days Free Trial—10 Months to Pay

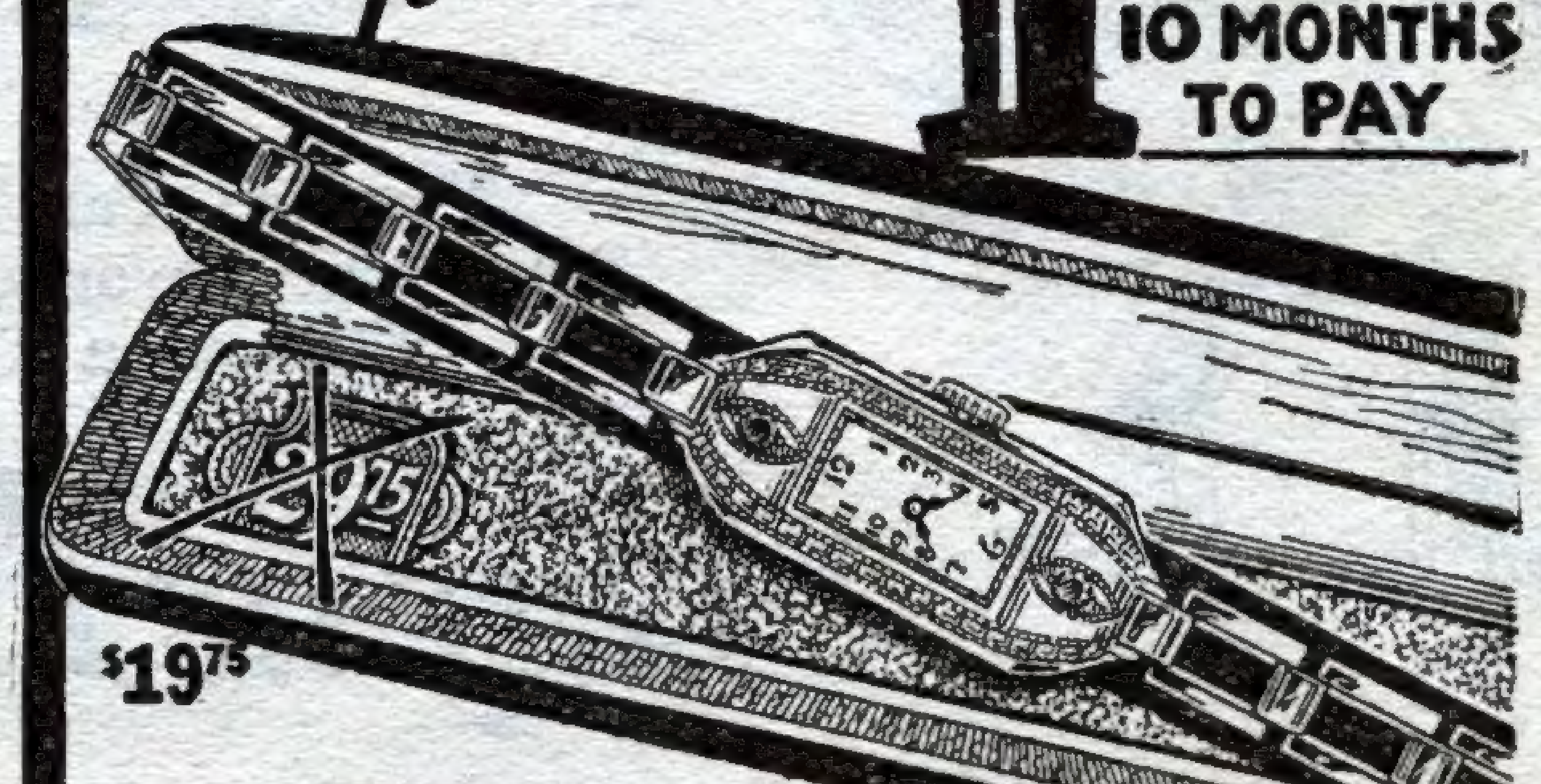
If you can duplicate our values anywhere, send back your purchase and we'll return your dollar. If convinced you cannot equal our values just pay the small amount stated each month.

Satisfaction Guaranteed

Written Guarantee Bond accompanies every diamond and watch purchased. From start to finish your satisfaction is assured. You'll never see values like these again—nor more liberal terms. Place your order TODAY—*satisfaction absolutely guaranteed.*

[Residents of Greater New York are invited to call in person at our salesrooms.]

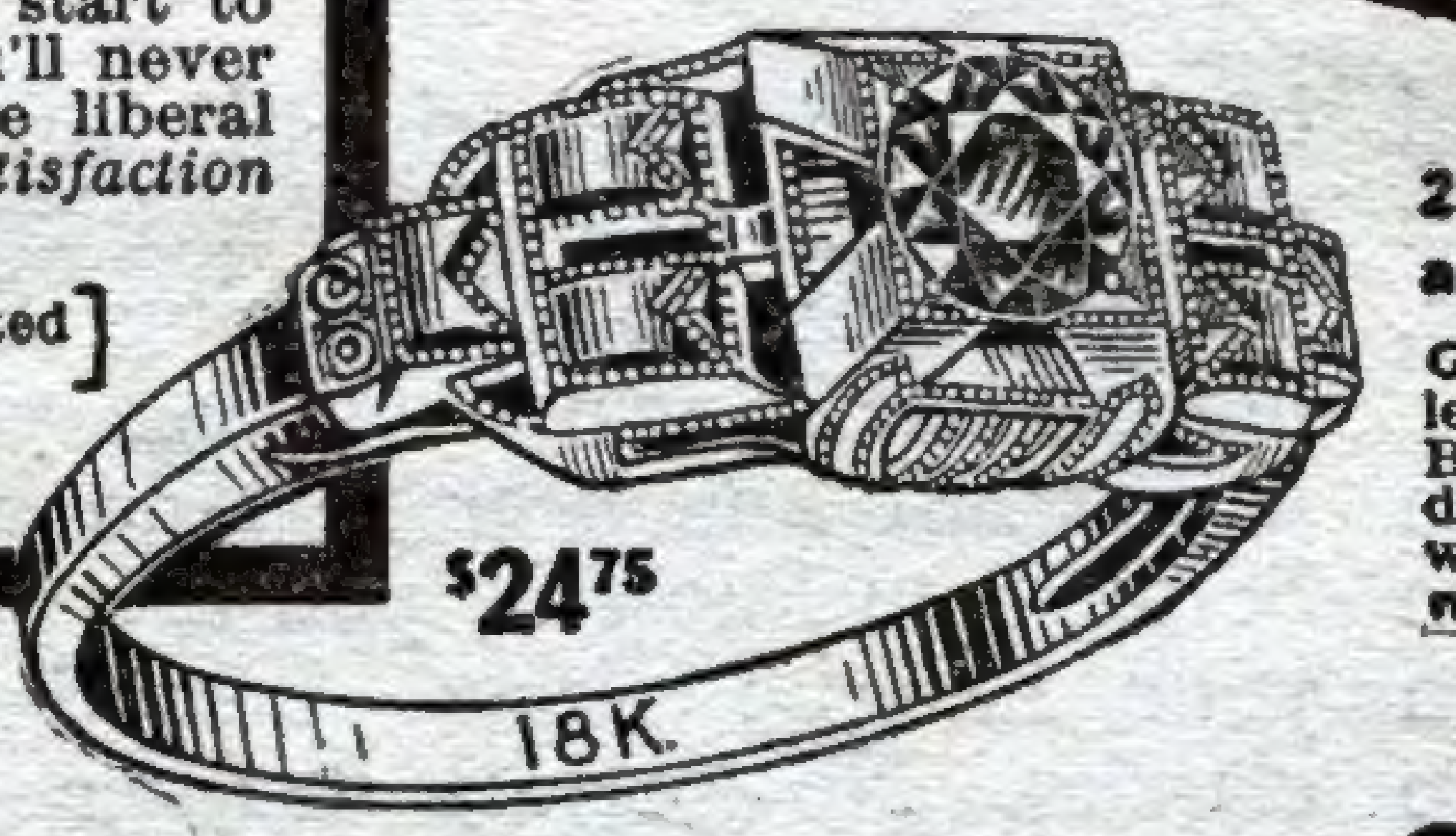
Sent to you for only $1.00 DOWN
10 MONTHS TO PAY



$19.75

2 Diamond Baguette and only $1.87 a month

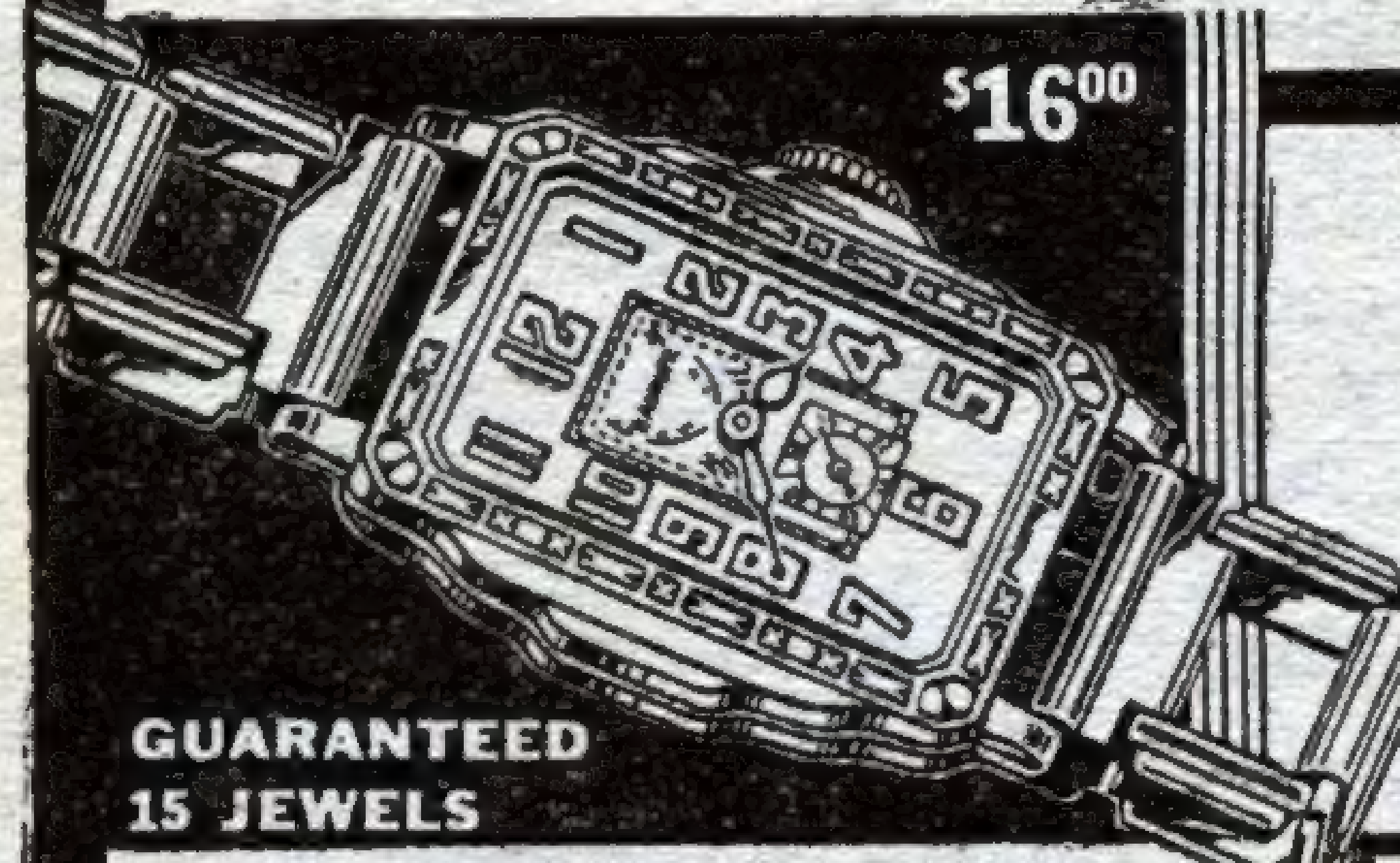
GB 1 . . . Here is value which challenges all comparison! Latest style Baguette wrist watch. Slender, dainty, white lifetime case and set with 2 sparkling, Genuine Diamonds. Guaranteed dependable, genuine baguette movement. Newest type bracelet to match. Complete in handsome gift case. *Formerly* $29.75. *Get Acquainted Sale Price Only* $19.75—$1.87 *a month.*



$24.75

GENUINE DIAMOND RING Only $2.37 a month

GB 2 . . . Strikingly new 18K Solid White Gold lady's mounting of exquisite design; delicately hand pierced and set with a specially selected brilliant genuine blue-white diamond. Offered for the first time at this low price. Only $24.75—$2.37 *a month.*



$16.00

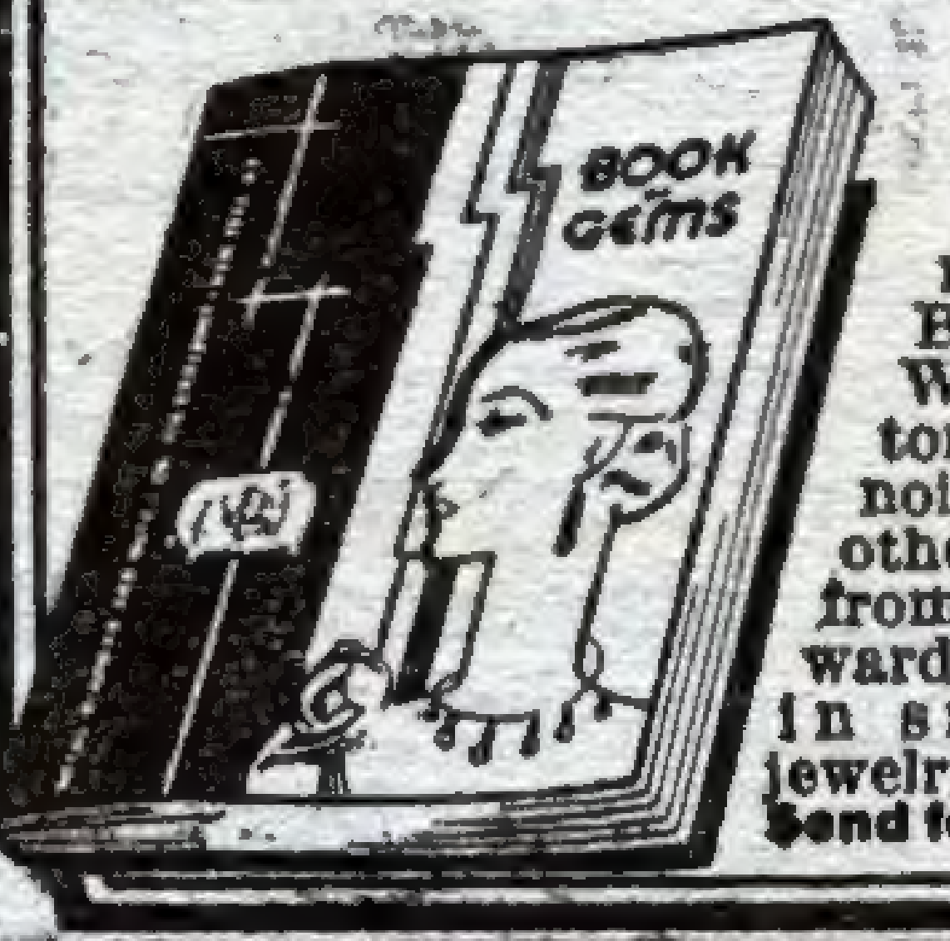
GUARANTEED 15 JEWELS

Only $1.50 a month

GB 3 . . . Newest design, gentleman's wrist watch; handsomely engraved, sturdy, white, permanent case. Fully guaranteed. Standard 15-jewel movement. Link bracelet to match. *Get Acquainted Sale Price Only* $16.00—$1.50 *a month.*

Gift Case FREE With Every Purchase

FREE! Send for latest catalogue showing values $25 to $1000

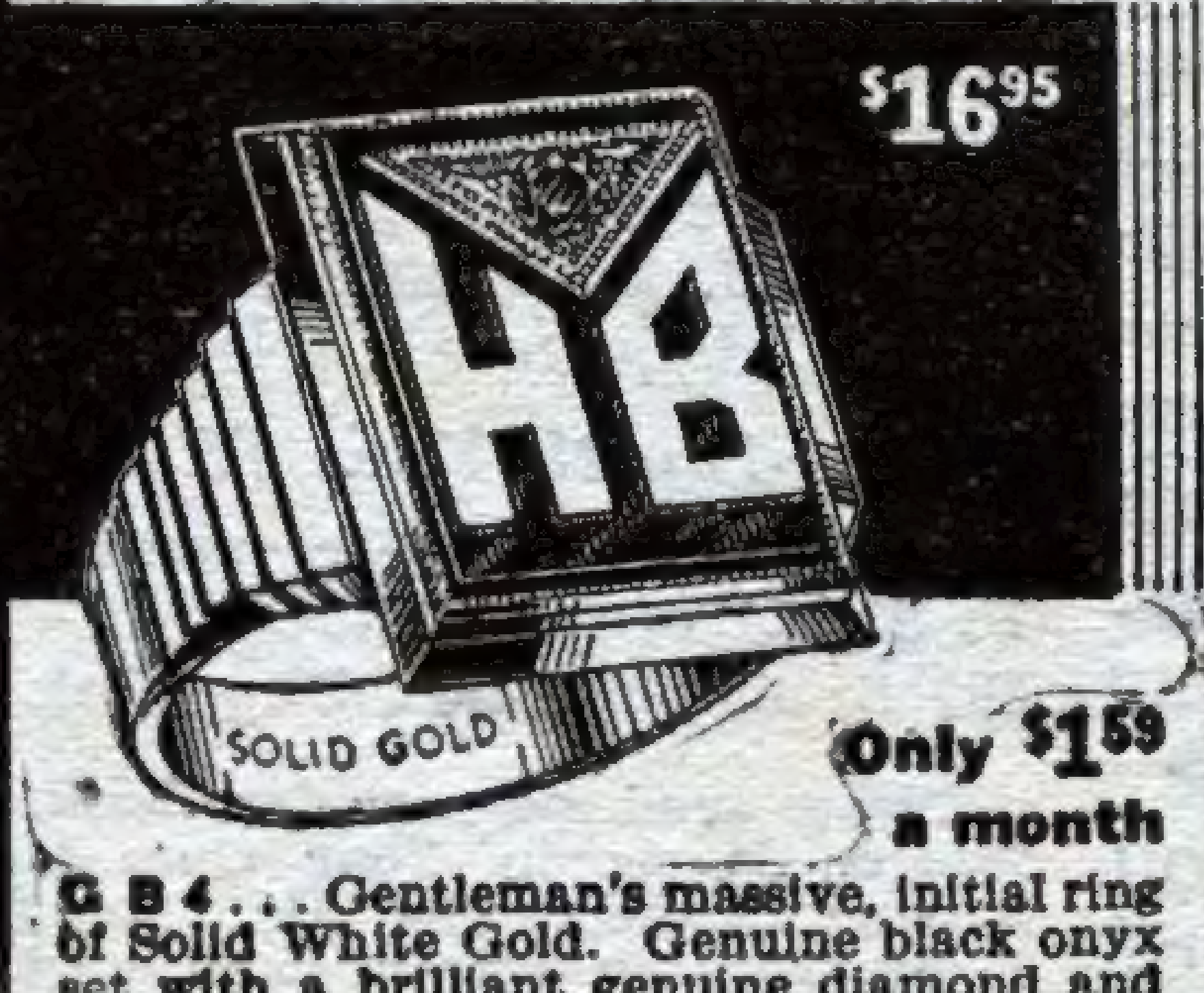


Illustrates hundreds of special values in genuine, blue-white diamonds; Bulova, Benrus, Elgin, Waltham, Hamilton, Howard, Illinois Watches, and other standard makes from $12.50 and upward; special bargains in smart modern jewelry and silverware. **Send for your copy today**

$19.85

9-Diamond Wedding Ring Only $1.88 a month

GB 5 . . . Exquisite, newest style wedding ring set with 9 fiery, genuine diamonds. Beautifully hand-engraved. 18K Solid White Gold. *Get Acquainted Sale Price Only* $19.85—$1.88 *a month.*



$16.95

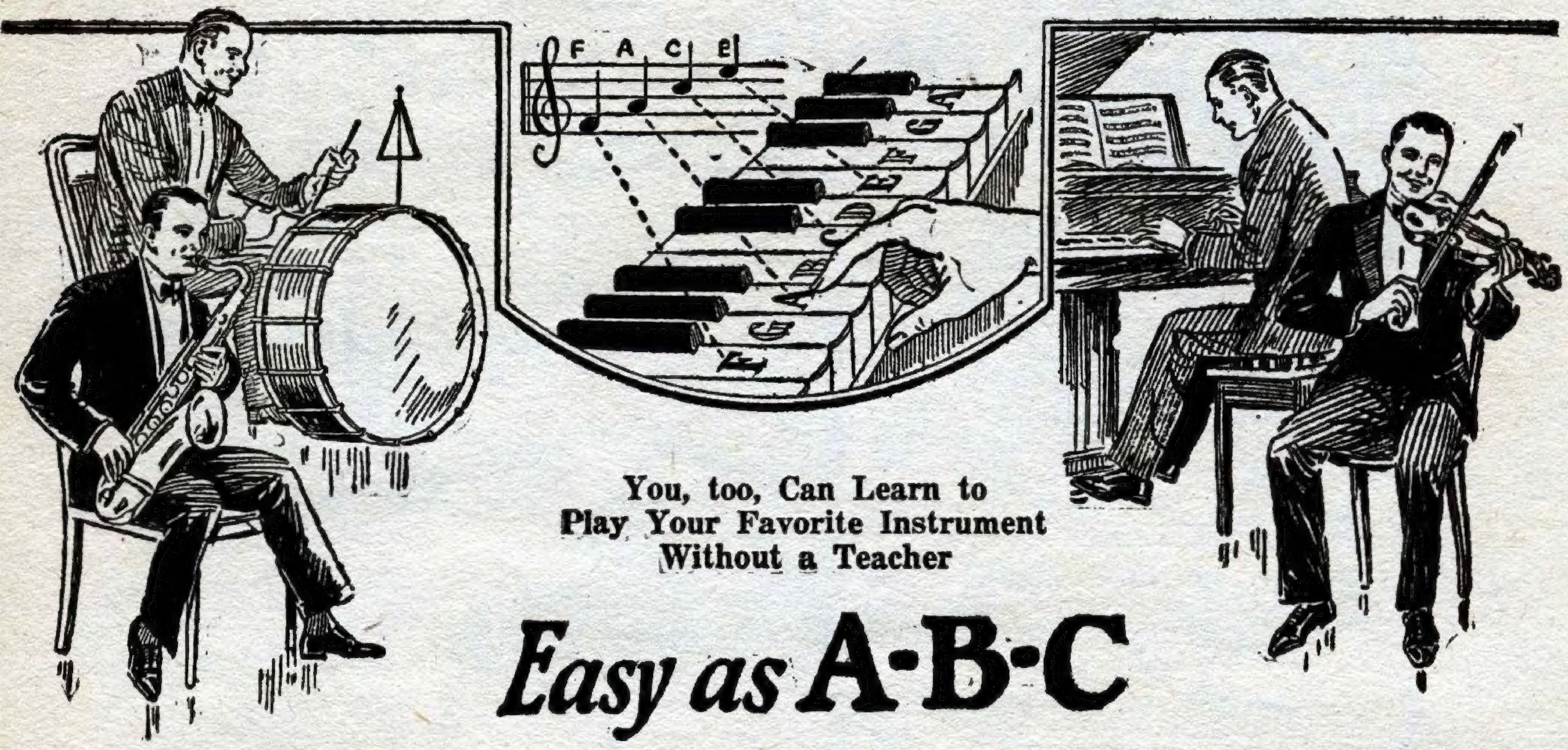
Only $1.59 a month

GB 4 . . . Gentleman's massive, initial ring of Solid White Gold. Genuine black onyx set with a brilliant genuine diamond and your initials in raised White Gold. Specify 2 initials desired. *Get Acquainted Sale Price Only* $16.95—$1.59 *a month.*

ROYAL DIAMOND & WATCH CO.
ADDRESS DEPT. 58-G
170 BROADWAY, NEW YORK

Half a Million People

have learned music this easy way



You, too, Can Learn to Play Your Favorite Instrument Without a Teacher

Easy as A-B-C

YES, over half a million delighted men and women all over the world have learned music this quick, easy way.

Half a million—what a gigantic orchestra they would make! Some are playing on the stage, others in orchestras, and many thousands are daily enjoying the pleasure and popularity of being able to play some instrument.

Surely this is convincing proof of the success of the *new, modern method* perfected by the U. S. School of Music! And what these people have done, YOU, too, can do!

Many of this half million didn't know one note from another—others had never touched an instrument—yet in half the usual time they learned to play their favorite instrument. Best of all, they found learning music *amazingly easy*. No monotonous hours of exercises — no tedious scales — no expensive teachers. This simplified method made learning music as easy as A-B-C!

It is like a fascinating game. From the very start you are playing *real* tunes, perfectly, by *note*. You simply can't go wrong, for every step, from beginning to end, is right before your eyes in print and picture. First you are *told* how to do a thing, then a picture *shows* you how, then you do it yourself and *hear* it. And almost before you know it, you are playing your favorite pieces—jazz, ballads, classics. No private teacher could make it clearer. Little theory — plenty of accomplishment. That's why students of the U. S. School of Music get ahead *twice as fast—three times as fast* as those who study old-fashioned plodding methods.

You don't need any special "talent." Many of the half million who have already become accomplished players never dreamed they possessed musical ability. They only wanted to play some instrument—just like you—and they found they could quickly learn how this easy way. Just a little of your spare time each day is needed — and you enjoy every minute of it. The cost is surprisingly low—averaging only a few cents a day—and the price is the same for whatever instrument you choose. And remember you are studying right in your own home—without paying big fees to private teachers.

What Instrument for You?

Piano
Organ
Violin
Banjo (Plectrum, 5-String or Tenor)
Clarinet
Flute
Harp
Cornet
Piccolo
Guitar
Hawaiian Steel Guitar
Drums and Traps
Mandolin
Ukulele
Trombone
Saxophone
'Cello
Sight Singing
Voice and Speech Culture
Harmony and Composition
Automatic Finger Control
Piano Accordion
Italian and German Accordion
Juniors' Piano Course

Don't miss any more good times, learn now to play your favorite instrument and surprise all your friends! Change from a wallflower to the center of attraction. Music is the best thing to offer at a party—musicians are invited everywhere. Enjoy the popularity you have been missing. Get your share of the musician's pleasure and profit! Start Now!

Free Booklet and Demonstration Lesson

If you are in earnest about wanting to join the crowd of entertainers and be a "big hit" at any party—if you really *do* want to play your favorite instrument, to become a performer whose services will be in demand—fill out and mail the convenient coupon asking for our Free Booklet and Free Demonstration Lesson. These explain our wonderful method fully and show you how easily and quickly you can learn to play at little expense. The booklet will also tell you all about the amazing new *Automatic Finger Control*. Instruments are supplied when needed—cash or credit. U. S. School of Music, 867 Brunswick Bldg., New York City.

Thirty-fourth Year (Established 1891)

U. S. SCHOOL OF MUSIC
867 Brunswick Bldg., New York City

Please send me your free book, "How You Can Master Music in Your Own Home," with inspiring message by Dr. Frank Crane, Free Demonstration Lesson, and particulars of your easy payment plan. I am interested in the following course.

....Have You Instr. ?............

Name ....
(Please Write Plainly)

Address ....

City........................ State............

VOLUME
7

AMAZING STORIES

THE
MAGAZINE
OF
SCIENTIFICTION

JULY, 1932
No. 4

T. O'CONOR SLOANE, Ph.D., *Editor*

MIRIAM BOURNE, *Managing Editor*

Editorial and General Offices: 350 Hudson Street, New York, N. Y.

Extravagant Fiction Today - - - - - - - - - - Cold Fact Tomorrow

Cosmogony

By T. O'Conor Sloane, Ph.D.

IN the English language there is a word which is derived from the Greek and whose meaning could be radically changed by the insertion of the letter "n." The word is cosmogony and it means the origin or coming into being of the world of matter as it exists in its various forms today and how this world we live in came about. Now, if we put in an "n" and call it cosmognosy by a crude etymology, that would mean the knowledge of the universe, which our scientists are striving for, and who has that?

The astronomers of the world are spending long hours in observation of the heavens and the calculators in the observatories are spending still longer hours in calculations. Chemists are trying to get a perfect list of the elements and of their isotopes, the isotopes accounting for the fractional differences in the atomic weights of some of the elements, one from the other. There seems to be a chance that the unitary figure of hydrogen, if we omit the decimal .008, would give us a basic unit to take care of the 92 atomic weights which would be the acme of simplicity. Then we have the investigations of the atom. and the hopes entertained by some of the disintegrated atom giving us a source of power.

It is fair to say that the range of study of cosmogony is bounded on the one extreme of magnitude by astronomy and on the other extreme by chemistry and the section of physics, which deals with radiations, here treating of the extreme of minuteness. The greatest minds of humanity are engaged in these studies—the study of the world of space, almost of infinity as we may call it, and the world of the electron and proton, which are the constituents of the atom, and are infinitely minute for our conceptions.

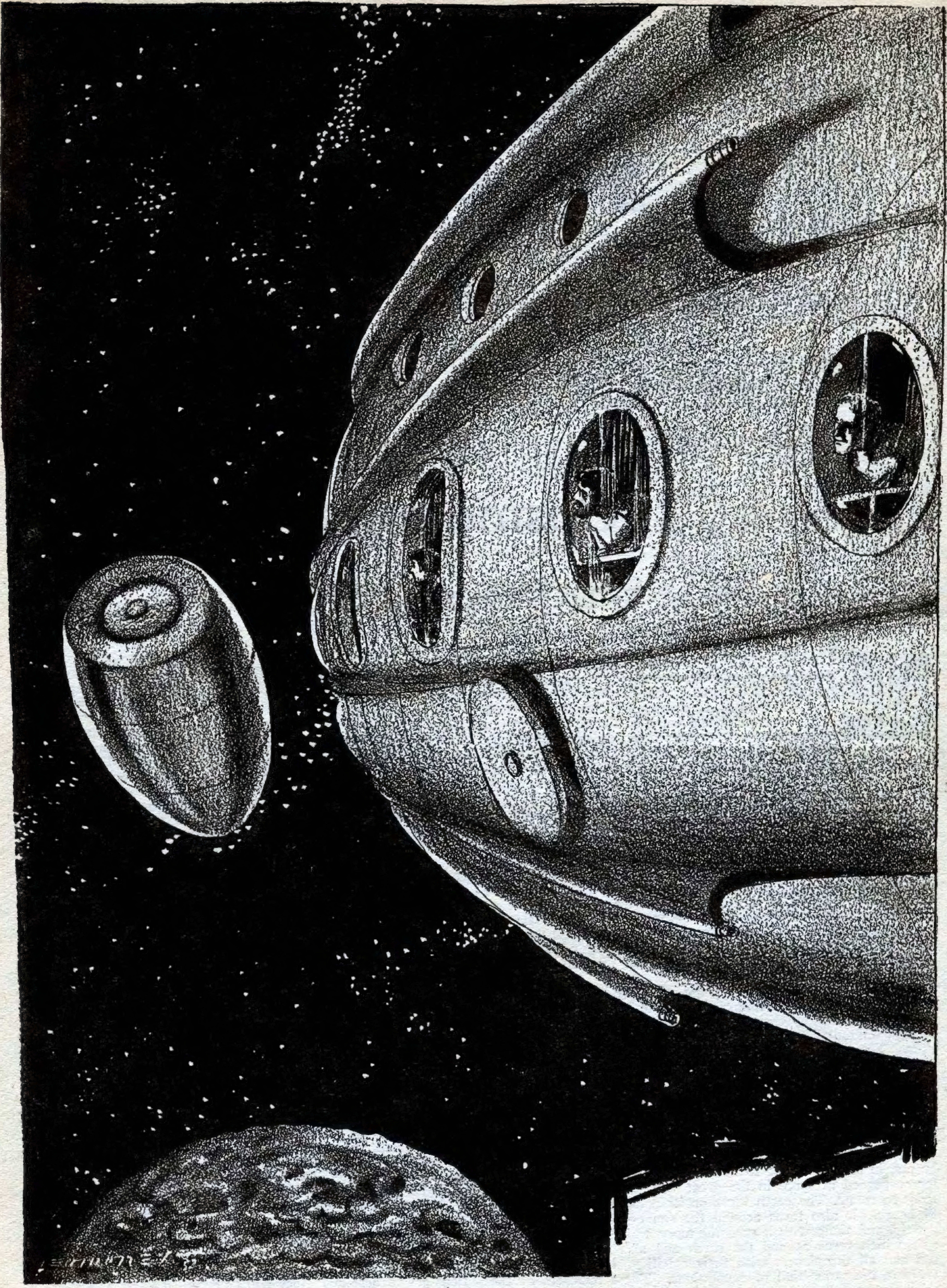
The astronomer examining the heavens through his telescope, sees dispersed over their extent a great number of nebulae. There seems to be a strange and universal tendency, as it may be put, in cosmic matter to rotate, matter of the universe, matter suspended in space in the great void, for it is nearly that, tends to rotate. The earth turns on its polar axis once in about 24 hours. It also turns around the sun once a year, approximately, and along with it goes the moon which turns on its own axis which turns around the earth and also turns around the sun and all the planets with their satellites, if they have any, perform the same kind of revolutions. These members of the solar system follow some laws which seem curiously simple and present good illustrations of the rotation of worlds. The nebulae, which may be called the jellyfish of the heavens, also rotate about a central or approximately central axis. Each is a mass of extremely light gas. There is a general assumption that there was an original primeval nebula filling all space, and the idea of this great all-embracing nebula is about as near as we can come to the chaos out of which the world is supposed to have come. The density of the present nebulae is put at about a thousand million times that of this nebula of chaos, yet these nebulae are inconceivably light. If we make the denominator of a fraction one followed by thirty zeros and give it as a numerator five, that expresses approximately the value of the specific gravity of a typical nebula, taking water as a unit, yet these masses of inconceivably light gas have to rotate. The celebrated nebula in Andromeda take 19 million of years to make one rotation, but its diameter is so large, that towards the circumference its substance moves at the rate of hundreds of miles per second.

Our earth seems to do better than that because it makes a complete revolution in a day at the rate of something like seventeen miles per second.

If we go back into the history and writings of the old philosophers, we find that the formation of the world had long engaged their attention. Hundreds of years before the Christian era the philosophers of the world were studying it, and it is fair to say, without any very tangible results. About two thousand years ago, the philosophers of Greece and Rome laid a simple foundation for the building up of modern theories of this cosmogony. We find a sort of general law prevailing in the great void that leads to the formation of systems of bodies rotating about a central orb, so that every nebula seems to have in its essence the makings of a planetary system.

But now let us go to the other end of things. Will mankind ever discover the basis of a law, which suggests that matter should be made of only 92 elements, of the simplest mathematical relations? These relations of the atoms are so simple in the atomic weights, that there must have been some law back of their formation.

And now let us go a step further and come to life. It would seem as if the philosophers of the world had a hopeless task before them in trying to find the laws which brought about the formation, we will not say of an animal, but of any part of an animal. It does not seem as if such wonderful organs as the eye could have been evolved fortuitously. When future generations get at these laws, they will be qualified to put the letter "n" into cosmogony, which will change its meaning from the formation of the world to knowing the process of formation. Humanity will have to wait a long while for that acme of knowledge to come about.



He had come out here in anticipation of just such a thing as had happened; had hovered in space with the H-4 . . . hoping to rescue anyone who might be set adrift in the space car. . . .

Thia of the Drylands

By Harl Vincent

Author of "Venus Liberated," "Power," etc.

IT seems to us more and more logical to believe that any achievement which the mind can conceive of can eventually be attained, and perhaps for that reason, if for no other, interplanetary travel moves ever closer to the realm of possibilities. Even if such a seeming miracle should be performed within the lifetime of some of us, we should probably gasp at the risk the first experimenters take and immediately assume a casual acceptance of the wonder. Still, there will undoubtedly be a world of possibilities of adventure for many, many years after interplanetary travel becomes an established fact.

Illustrated by MOREY

A Long Chance

"IS that final, Mr. Sykes?"

"It is, Barron. Sorry, but I can say no more—we've done all we can. You're just out of luck, I'm afraid." The president of Interplanetary Lines, Incorporated, could not meet the gaze of the tall young man who faced him across his polished mahogany desk.

Cliff Barron's white lips set in a tight, grim line, and fire flashed from his shadowed eyes. He was sick, very sick, and disabled besides. Broke. Let down by the employers he had served honestly and faithfully for more than ten years. Hopeless of the future.

"It's rotten, Mr. Sykes," he husked, "I wouldn't have believed it of Interplan—I—I——"

Scathing words of denunciation died in his throat. Leonard Sykes had turned to his papers and his pudgy finger was on the pearl button that would summon his secretary. The interview was ended.

Curbing his wrath and disappointment, Cliff rushed from the office and through the long main aisle of the repair shop where the slender shapes of several etherships rested in their cradles. Out into the open air and stumbling across the landing field, his paralyzed arms dangling woodenly at his side and the clawed fingers, that once had been so sure and strong, resisting stiffly and without sensation the effort of his will that should have clenched them into hard fists.

Dazedly he wandered over the field to the small pavilion where visitors gathered on exhibition days. The place was deserted and he sank to a seat on one of the stone benches.

After a hideous pain-fraught moment he raised his eyes to where one of the small passenger-carrying etherships was taxying to position for a takeoff. It was the J-18! His own ship—the one he had last piloted. The one in which he had been stricken with this terrible thing that had made of him a useless, pitiful wreck.

There was the raucous shriek of a siren and the J-18 took to the air like a frightened bird. Climbing steadily under the tremendous lift of her helicopter screws, the little vessel was quickly lost in the low-flung clouds over the Long Island field. For a time Cliff could hear the pulsing throb of the motors used in atmospheric flying. Growing ever fainter, it was. And then even that sound had trailed off into the gloomy silence.

The gray of the skies flashed brightly crimson; dulled again, and there was a second flash, less brilliant than the first. And now the heavens were rent by the hoarse scream of the vessel's rocket tubes. Ear-splitting that first blast, giving rise to thunderous protestations of the riven air more than a mile above. The second discharge came as a faintly derisive echo of the first, and following long after. Many miles up there in the stratosphere by this time, the J-18 was plunging into space with the ever increasing speed of full acceleration. If only Cliff were able to be in that pilot's seat!

He groaned aloud and, swinging his useless arms like pendulums, beat the knotted hands frantically against the stone bench. A voice laughed crazily in the stillness of the deepening twilight; his own voice, cracked and unreal. Realizing then, that he was on the verge of complete breakdown, Cliff Barron fought desperately back to sanity.

But returning calmness of mind brought increased bitterness and intensifying hatred of Leonard Sykes. True, the corporation had paid most of Cliff's hospital expenses and had provided for him the best medical attention available. But they had left him in this condition to shift for himself, disabled for life—miserably. And the one chance he had for complete recovery had been denied him by Leonard Sykes, the hard-boiled financier, whose coffers Cliff had helped to fill. Denied for no good reason at all that Cliff could see—Sykes had refused to discuss it almost; had offered no explanation. . . .

A crunching footstep roused Cliff from his wrathful thoughts and he looked up to see a stranger approaching him. Not entirely a stranger, he saw on closer inspection, but a man he had met or seen somewhere. A man big in stature and of confident bearing.

"YOUR name is Barron, isn't it?" he asked, addressing Cliff.

"That's right."

"Mine's Vetter—Carl Vetter. You may remember me as one of the passengers of the J-18 on the last trip you made as her pilot."

"Oh, yes." Cliff did remember; the man had been there, when the strange Martian fever laid him low.

"I've been interested in your case," Vetter went on as Cliff rose from his hard seat, "and perhaps I can help you. You'll not take offense if I ask you to talk it over with me?"

Wild hope surged through the young pilot's being. "Why—why no, Mr. Vetter. I don't know how to tell you—I——"

"Good," brusquely, "That's fine. Come along with me to New York. My autogiro is over here and we can be in my apartment in no time at all. Talking will be easier there."

The big man turned swiftly from Cliff's stammered protestations of gratitude and strode across the field toward the private hangars. The young pilot stumbled after him, torn by doubts and hopes. It was too much to believe—but at least it was a chance to talk with some one who was willing to listen. Someone whose every action betokened sympathetic understanding.

A little later they sat in Vetter's luxurious Park Avenue apartment, having covered the ninety miles to New York in less than a half hour of the man's skilful piloting. Vetter, though bearing the air of a man of means and influence, was an adept at handling the little ship of the lower air levels.

"No doubt you are surprised at my approaching you this way," Cliff's host began. "But you'll understand when I've finished. Really, I have selfish reasons—several of them—and I'm going to offer you a job you may not accept."

Cliff hadn't expected this. "A—a job!" he stammered. "What sort of a job can I hold—now?" Awkwardly but significantly, he swung one of his dangling arms, and a slow flush crept into his hollow cheeks. Was Vetter making sport of him?

"I mean it, Barron. This is a job you can take and can do well, if you'll accept it. Anxious to visit Mars, aren't you? Risapar, to be exact?"

"Yes, yes. How did you know?" Cliff half rose from his chair.

"I told you I had been interested in your case—I've been doing a bit of inquiring. Will you talk freely of what happened today in Leonard Sykes' office?"

Cliff's anger flamed. "Are you his friend?" he demanded.

"An acquaintance only—formerly a business associate. You need have no fear of speaking out——"

"I haven't. Listen, Mr. Vetter, I'm not quite thirty years old, but I've piloted etherships for Sykes more than ten years. Piloted with the best of them, and helped earn him a huge fortune. I contracted this Martian disease on one of his ships, as you know, and I claim he owes it to me to see me out of the—the results—if it is at all possible. Doesn't he owe it to me?"

Cliff's voice rose on the last and he stared hard at his host.

Vetter nodded slowly. There was pity in his friendly gaze and something of Cliff's own rising anger. "I certainly think so," he agreed feelingly. "Do you mean to say he refused you passage to Risapar—that he refused to do anything further in your behalf?"

"He did just that, the swine! When I was discharged from the hospital they told me I had only one hope—to see the great surgeon Lintarg of Risapar. He, they said, might restore my strength. My arms—my hands that are . . . as you see them. . . ." Cliff swung the useless members hopelessly.

"And you told this to Sykes?" Vetter urged gently.

"Sure I told him—told him everything. Begged him; asked him for passage to Risapar, for a loan to pay Lintarg's fee. Told him I'd work it out when I recovered. And I know I would recover—I know it! But what did Sykes care? I've salvaged more than a million for him in one trip, Mr. Vetter, and he had the nerve to turn me down. Can you beat it?"

"No, I can't." Vetter was obviously much moved by the recital. "Didn't he explain his refusal in any way, Barron?"

"No. Just sat there tight-mouthed, looking out of the window. Said he was sorry. Sorry—good God!" Cliff looked down at the talons that were his hands, shuddering.

His host arose and stood over him, resting a hand on his shoulder. "It's a shame, Barron," he said feelingly, "and I can't say I blame you for feeling this way. It's difficult to excuse him——"

"Excuse him! I'd like to see him in my place—done for—maimed as I am maimed. I wish——" Cliff choked, and his wasted face was contorted with hatred as he raised it to Vetter.

"Just so, Barron—I can appreciate your bitterness. And really, what you have told me makes things a little easier—about this job I want you to take, I mean."

Cliff recovered his poise. "What's that got to do with the job?" he inquired blankly.

"I'll explain." Vetter drew his own chair close and resumed his seat. He then launched forth in rapid speech.

"THIS action of Sykes and your feeling toward him does make a difference," he said. "At least I feel it will make a difference with you. Because, Barron, my project is one that is in direct competition with Interplanetary; it will undoubtedly bring about the financial ruin of Leonard Sykes if it is successful. And if you accept this job you will be working against Sykes. See what I mean?"

"See! I'll say I do!" hissed the young pilot. "Nothing would suit me better."

"I have obtained control," his host continued, "of a new means of traversing space that will render obsolete the present rocket-ships. The vast investment in Interplanetary Lines and Sykes' control of it will become worthless. His ships will be so much scrap—that is a foregone conclusion. But more important to you, I know, is that you will have the chance you long for—you will go to Lintarg for this treatment which can cure you. And your name will go down in history, besides, as the——"

"How? Tell me?" Cliff's cheeks burned; he was fevered with excitement.

"——as the first man to cross space by the new method. Instead of taking a journey of days to reach Mars, you will make the trip in less than an hour. Think of it! You will travel at a speed of twenty thousand miles a second. Safely. All mankind thereafter will traverse space at such speeds. Do you agree with me that it will mean the end of rocket-ship travel?"

"Lord yes, but how——"

"We will *shoot* you across space in a projectile-like car. Like being shot from a gun, excepting in this case the gun is a magnetic one and its barrel extends throughout the entire distance of the journey. It is a vast tube spanning the ether between two planets."

"What-a-at!" Cliff began to doubt his own ears.

"Just that. It's an invisible tube, of course, and is projected in much the same way as radio impulses are projected in a concentrated beam. A hollow cylinder of etheric vibrations is what it really is. The cylinder may be likened to the carrier beam used in radio, only the superimposed frequency serves an entirely different purpose. Instead of carrying voice or television impulses, the heterodyning frequency produces nodes of energy at regular intervals throughout the enormous length of the tube—magnetic fields of unbelievable power which draw the projectile-like car along within the tube with ever-increasing velocity. All controlled, of course, from transmitting and receiving stations located on the planets between which the car travels. Don't you see?—the regularly-spaced fields of magnetic force are energized in swift succession and the car, which is of magnetic material, is speeded through each in turn. Gathering momentum with each pull until—pfff!—it is beyond comprehension."

"I'll say it is!" The flush had left Cliff's cheeks. He was beginning to appreciate the seriousness of the matter. "And you want me to take the first trip in this —this bullet?" he asked.

"Exactly." Vetter rubbed the palms of his hands one over the other in nervous anxiety as to his guest's reception of the proposal. "And don't think I'm asking you to commit suicide, Barron. We have sent living creatures across to Mars—guinea pigs first; then a dog, and most recently a small pony. All arrived safely—quite unharmed. I swear it; I have proof. But to obtain adequate financial backing for the entire project I must have a *man*. Only by sending a human being across safely can I overcome the scepticism of the big men who are interested in the financing. And there must be secrecy until the project is well under way. Don't you see?—that is one of the reasons I chose you—Barron——"

"Yes, I see." Cliff rose jerkily and moved to the table where he stood with face averted, his dangling arms leaden at his sides.

Vetter maintained a discreet silence as his guest thought it out.

There would be a certain satisfaction to Cliff in obtaining some measure of revenge on Sykes in this manner. Certainly he had nothing but bitterness in him toward his former employer, nor would he feel any sympathy or regret if Vetter's scheme actually came to bring about the man's downfall. But this was relatively unimportant; his own idea of squaring the account was of something more personal. Once his vigor and the use of his arms and hands were restored he'd find a satisfactory way—more satisfactory than mere financial ruin for Sykes. He'd make him suffer physically—cruelly.

And he'd gloat as he did so.

Most important, though, was that he get to Lintarg. He *must* get to Lintarg. And Vetter's proposal was a possible means of attaining that end. A long chance, maybe, much longer than Vetter would have him believe. Perhaps they *had* sent dumb animals across the gulf of space in this crazy bullet-thing. But would the reaction of such tremendous acceleration be the same on humans? That was what Vetter had to prove to his backers, of course, and he hadn't been able to find a man willing to risk the trip.

For that reason he had taken advantage of Cliff's disability and despair to . . .

Well, suppose he had? Vetter was sincere in his belief in this amazing contraption, and had been frank in divulging the details. If he was wrong, that trial trip meant death to the man who took it. Death. Cliff contemplated it in a new light. Rather have death than a life of this. Permanently disabled . . . he'd be a ward of the government; a derelict. Life? That meant activity to Cliff, the sort of activity he had always glorified in. Without the zest of that activity which had been his, he'd rather have the other—death . . . Oblivion . . . release. . . .

"I'll do it, Mr. Vetter," he blurted, wheeling suddenly and facing Vetter.

"Good—good boy!" The big man thrust forth his hand, but let it fall swiftly when he saw the look of pain that flashed across the young pilot's drawn features.

"Sorry Barron," he mumbled apologetically, "I didn't think." Then brightening with excitement: "But you won't be sorry, boy.

"You'll have it all back; be shaking hands with me in a month.

"Come on, we'll arrange the details."

CHAPTER II

Shot Across Space

TWELVE hours later they stepped from Vetter's plane to the flat top of a mesa in the Painted Desert of Arizona. A spot far off the regular air lanes—safe from prying eyes.

"You'll understand the need of secrecy," Vetter said when they entered a small building which topped a lift shaft that was bored into the solid rock of the mesa, "If Sykes learned of this he'd put his vast resources at work to head it off. His own vast investments at stake, he'd spare none of his influence or political power to squash the thing. Scientific progress and the benefit to mankind would mean nothing—you know that."

"Sure." Cliff Barron's thoughts were upon the journey he was about to make; nothing else seemed important. A sick feeling came over him as the lift dropped into the darkness of the shaft.

In the hollowed-out heart of the mesa was massed a most amazing array of machinery. Cliff could only liken it to a huge power plant he had visited in 1997 when he was a fresh recruit of Interplanetary Lines. There were mighty generators here in the bowels of the mesa, generators driven by atomic engines whose fuel was common shale. Vetter told him that the atoms comprising this ordinary stone were disrupted in the retorts feeding the engines, and the enormous nuclear energy was thus liberated for use. Cheap and unlimited power. Huge coils of copper tubing surrounded the shiny projectile that was the space car, and great busbars connected these with the generators. This was the projector of the great invisible tube of space through which Cliff was to be hurled.

The blast of a whistle rose suddenly, shrilly. Men were running here and there, manipulating switches that started the main generators, operating controls that swung the giant coils and the space car itself around to a new angle. An observer was at the eyepiece of a great radio telescope signalling instructions.

"Just in time, Barron," said Vetter, "They are preparing for the trial. We are now facing toward Mars at the proper angle."

"I'm ready." Cliff's reply was in steady voice, but he was as a man in a trance, moving listlessly and dazedly toward the car.

On a platform beside the entrance manhole of the steel projectile stood a small group of men, whom Cliff took to be the financiers or their agents, who were there to witness the start. The workmen in the great hidden laboratory, Cliff saw with surprise, were all blinded artisans or deaf mutes. But, of course, Vetter would employ such men in order to preserve secrecy the better.

They were inside the space car then, he and Vetter, and the older man was speaking rapidly of the appointments of the strange vehicle of the heavens. It was hollowly quiet in the heavily padded interior. Then Cliff heard the pumps of the oxygen-generating and carbon dioxide absorption apparatus. No propelling machinery was in the car; he well understood that he was to depend utterly on the ray-operators outside. If they made a mistake. . . .

There were two compartments, one for freight and another for passengers. In the latter were about twenty deep-cushioned, spring-supported hammock berths. Vetter explained that these were to ease the pressure of acceleration and he assisted Cliff in disposing his body to best advantage in one of the comfortable berths. These swings were arranged so as to be reversible—at approximately mid-point of the journey they would swing around to take care of deceleration as well. . . .

Vetter's voice droned on, but Cliff was listening to the pumps. He wanted to be off. The sooner the better.

A buzzer shrilled its wasplike note.

"Three minutes now, old man," exclaimed Vetter. "I'll be leaving you soon. Here's your Martian letter of credit and a note to Lintarg. My men at the other end will take care of you. Good luck, now, and *au revoir*. See you in a few hours."

"Sure you will?" Cliff smiled; he was perfectly composed now that the time was at hand.

"Positive." Vetter grinned encouragingly and then was gone.

Cliff heard only the pumps and the jangling of the bolts as the circular cover of the outer hatch was bolted to its hermetically sealed seat. He was alone in this man-made contraption that was to bring him his chance of life . . . *real* life once more . . . or of death.

Time passed at a snail's pace as he waited. Funny, if Vetter was so positive, that he hadn't made the initial trip himself. Cliff set his lips in a bleak smile. They never took any chances with their own precious lives, these promoters. Nor did they find it easy to get others to do so for them. Only in Cliff's case it was different.

He thought of the things Vetter had told him. With Mars and Earth in their present relative positions, the distance between the two bodies was fifty-five million miles. And the trip was to require forty-five minutes!

The buzzer shrilled again. Sixty seconds to go, Vetter had told him, after that repeated signal. Cliff's heart was pounding so loudly he could hear its thuds. Unconsciously he was holding his breath and was counting off the seconds. And he had stiffened his body in anticipation of the shock that was to come.

This would not do. Vetter had warned him to relax completely so his body might better withstand the pressure. He relaxed.

Sudden terrific vibration gripped the car, causing the springs of the hammocks to resound noisily. Cliff was pressed into the cushions with tremendous force. The journey had begun.

It was incredible, impossible, that pressure which smashed him down. His body suddenly had acquired enormous weight, the weight of a behemoth. It was as if the paralysis of his arms and hands had taken hold of his entire being. He couldn't move a muscle of his lower body or even turn his head.

And, second by second, the pressure increased until it seemed his bodily frame must give way under the strain. Breathing had become difficult, for the muscles of his lungs were overtaxed in expanding the unwonted weight of flesh and bone that covered them. His eyes burned in their sockets; his vision distorted. The weight of cornea and aqueous humour was depressing each lens so it no longer focussed. And then, without warning, came oblivion. For Cliff Barron there was no further knowledge of the journey.

Faster and faster still the tiny space car drove on into the void, into the mysterious depths of the heavens towards Mars, where anxious observers awaited its coming.

LOW voiced mumblings impressed themselves on Cliff's returning consciousness. Sharp questions in a querulous rasping tone, answers in whispered syllables of the dryland tongue of Mars. Cliff opened an eye experimentally and saw a squat bearded Martian conversing with a second one of greater stature and forbidding countenance. They stood but a few feet from the cot on which he lay in a dim-lit and unfamiliar room. Cliff closed the one eye as his own name was mentioned in the uncouth speech of the parched plains of the red planet.

"It is he—Cleef Barron—of the paralyzed arms. Even as the ethergram advised us. But Vetter must be mad; we can not let this one go to Lintarg. He knows too much—our plans would be ruined."

"Hush!" The other was speaking. "He is about to awaken. It is wonderful, Maranu—a complete vindication of Vetter's claims. If this man Barron had perfect health and strength, he would have come through conscious and entirely unharmed. Even as it is, he is little the worse for the experience. Think what it means."

"Surely I think. I know. But we must make away with him, I say; we must not heed Vetter's message. He is a sentimental fool. It is too dangerous that this one be permitted to live."

"Hush, I tell you—he awakens."

Cliff groaned and tossed, feigning a painful awakening. He had remembered the journey's start and Vetter's promises and was suddenly very much awake. If this was to be an argument as to his own life or death he wanted to take it standing. He dropped his legs over the edge of the cot and sat swaying weakly, though his head was now as clear as if he had just come out of a refreshing sleep.

"Where—where am I?" he stammered.

The one called Maranu grunted disgustedly as the other, the squat bearded one, thrust out his hand to help Cliff to his feet.

"You haff arrive safe in Risapar," the bearded one said in atrocious English. "No harm whateffer haff come to you. It iss——"

The big Martian Maranu shoved him roughly aside. "Enough!" he rasped in his own tongue. "It must be as I said, Durvil." His hand moved to the flame pistol at his belt.

"No!" The one called Durvil reddened angrily and pushed himself in front of Cliff. "No killing now. I tell you we——"

Maranu choked him off with a huge hand closing on his throat and Cliff looked blankly from one to the other as if in complete ignorance of the speech of the drylands.

A clamor rose outside the door; someone was shouting excitedly in the corridor. Maranu let loose his grip of Durvil's throat.

"They want to see him!" gasped the bearded one, "Maranu, you fool, they must see this man who has come across the void, else they will not believe. Are you mad?"

"True, we must show them," the big fellow agreed, "I shall wait."

Cliff would have welcomed any interruption at the moment. This byplay of the two Martians was puzzling; he could think of no reason why Maranu should want him out of the way. But he had no doubts as to the seriousness of the drylander's intent, nor would he have gambled any great amount on the value or permanence of Durvil's apparent friendliness to himself.

Maranu unlatched the door, grumbling, and there stood revealed in the hall an armed guard, a giant drylander who thrust his grimacing face into the room and jabbered unintelligently in the lowest dialect of his race. Durvil, the squat one, lunged toward the guard.

"Outside!" he bellowed as the fellow tried to shove his way into the room. "We will bring the traveler to the dome room. Report this to your captain—understand, scum?"

The big guard, a foot taller than the bearded one, cringed and withdrew. Cliff followed him in response to Durvil's imperious gesture of command, and the two he had first seen in this place brought up the rear. Durvil was berating Maranu in husky whispers as they passed along the corridor.

It was a queer reversal of the first order of things. Now it was apparent that Durvil was the higher in authority, though before the guard's coming Maranu had been the one to give orders. Cliff Barron knowing something of the strange temperament of the various races of Mars, was none the less puzzled.

They came out in a huge vaulted chamber that was quite like the one in the mesa of the Arizona desert. There were similar generators and the great copper coils of a projector of the hollow beam of ether vibrations. The space car itself rested on the receiving platform of the apparatus. It was from this place they had taken Cliff to the room where he returned to consciousness.

At the far end of the chamber was a group of Martians. Wondering, as he was led before them, Cliff saw that one was a woman. A strikingly beautiful woman, more like one from his own country, than like any he had ever seen in the drylands or canal cities of Mars. A woman of queenly bearing who sat on a cushioned and canopied couch surrounded by uniformed drylanders, and who stared at Cliff with the most remarkable of eyes. Wide-set eyes of lustrous jet in which a feral light glinted. Hypnotic eyes; compelling.

"It is the passenger, oh Thia," said Durvil, making obeisance.

"He is quite well and uninjured after the voyage?" The black eyes of this Thia showed no change of expression.

"Not well, of course—on account of his disability. But I can assure you, oh Thia, he has suffered no ill effect whatsoever due to the trip itself."

Durvil's voice was respectful but intimately confident. Evidently he was a personage of some account before this woman of dryland royalty, whoever she might be.

Thia's eyes were on Cliff and he thought he detected a softening of the hard glitter. "Oh, yes," she murmured, "the disability. He is to see Lintarg as Vetter requested?"

Maranu broke out in voluble objection, but was silenced by a fierce look from Thia.

"What say you, oh, Durvil?" she purred, bending her gaze on the bearded one.

"I say there shall be no killing. Maranu was ever violent. But I say he should imprison the passenger until the thing is done, that he may do us no harm."

"He must die!" rasped Maranu, "This one is a spy. Can you not see, oh, Thia, by his attention to our speech that he understands? He is not ignorant of our tongue, as he has protested."

"Is this true, Earthling?" Thia's voice was cold and hard as were her eyes.

Cliff looked full into those blazing orbs and saw there could be no dissembling with this woman. "True, yes, that I comprehend your speech," he admitted, "but that I am a spy, no. I know nothing of your plans and care less about them. I know only what Vetter told me; what he promised. I came here for one thing and one thing only—to visit Lintarg. To try his skill in this——"

He hesitated, looking down at his paralyzed members. Little he cared what devilment these drylanders might be cooking up. All that mattered was what he had come after; he wanted to be out of this place and on his way to the famous surgeon.

Again there was the softening of Thia's gaze, this time more noticeable. Again the grating expostulations of Maranu, silenced once more by the amazing woman who sat before them all.

"You see," Cliff ventured hopefully, "I have only one desire—I care nothing for your——"

"He must be imprisoned, oh, Thia," Durvil broke in firmly. "There is no other way, regardless of Vetter, regardless of——"

Something snapped then in Cliff Barron's brain. Perhaps it was the nightmare of the journey; perhaps the thin atmosphere and the low gravity of the red planet. Whatever it was, it sent him into a wild rage and he threw himself at Durvil. Though his leg muscles had been greatly weakened by his illness, they were of ample power here, being accustomed to carry much more weight of body on Earth. And he soared high in his mad leap, landing on the squat Martian with both knees and smashing him to the pavement.

"Now go ahead!" he yelled. "Let Maranu shoot, damn him! Damn you all—go on with your dirty work!"

The guards were upon him in an instant. With his useless arms in the way and encumbering him, he could only kick and butt. This was of little avail when they closed in from all sides. But he had the satisfaction of seeing Maranu go down when he brought a knee up into the big fellow's midsection; saw that Durvil lay still where he had fallen.

And then Cliff was helpless in the hands of the guards. Though he struggled mightily, they carried him away. He looked back.

Thia was standing alone, and her scarlet lips quirked in an enigmatic smile.

CHAPTER III

Word of Honor

CLIFF was taken to the room where he had first opened his eyes after the swift passage from Earth. More accurately, he was dumped unceremoniously on the stone floor by the guards and left to meditate on his rashness. A key grated in the lock.

"Of all the triple-plated damfools!" he muttered, crawling painfully to his feet, "I am the brightest." He sat heavily on the edge of the cot.

For some time he addressed audible and uncomplimentary remarks to himself by way of such jumbled echoes as might rebound from the blank walls. And then he had calmed in mind sufficiently to take stock of the situation and to speculate on the causes behind it all.

Either Vetter was in league with a gang of dryland cutthroats in some shady undertaking, or he was being duped by those in charge of operations at the Martian end of his space tube. Cliff was inclined to the latter view.

Certainly Vetter had been frank enough and fair enough in his arrangements for the dangerous trial trip. And generous. Cliff had seen the letter of credit that was safely buttoned in his inside vest pocket. He could feel the wadded lump against his ribs now. Fifty thousand zaks of Risapar exchange—enough to cover Lintarg's fee and still leave the young pilot independent. And a personal letter to the great surgeon addressed in Vetter's bold flowing hand. There had been no hitch at the other end; everything was open and aboveboard. But here—something was badly out of gear.

It was mighty queer that all those he had seen at this end were drylanders. Tough ones, too, most of them—like Maranu. And led by a woman like Thia! But Cliff recalled tales of desert pirates who preyed upon rich cities of the canals and mining settlements of the parched interior as well. Bands of ruthless murderers, these were, and well organized—the greatest problem of the militias and the red police of the scattered Martian communities. No reason a woman might not be leader of such a band—especially one with eyes like Thia's. No reason, either, that they might not be reaching out for new worlds to prey upon. And with this thing of Vetter's in their hands. . . .

Cliff raised his head and stared directly into those magnetic orbs of the girl Thia. She had entered noiselessly, and as noiselessly closed the door. But he had sensed her presence somehow. His head had come up without conscious volition.

Automatically he rose to his feet. Involuntarily he caught his breath. Her beauty, in this soft light, was dazzling. The curves of her youthful body were revealed rather than hidden by the draperies of a black gown that shimmered as she moved. She had bared her head of the tiara Cliff had seen there before, and a glorious crown of golden bronze hair tumbled in soft profusion about the creamy oval of her face. The scarlet lips were parted in a half smile. And her eyes, magically, had softened from the glinting jet to a liquid brown. Friendly eyes, and understanding now.

Cliff, getting a grip on his emotions, husked: "Well?"

"Well!" Thia smiled, and, smiling, she was radiant.

His suspicions rising afresh, the disabled pilot hardened himself against the spell of her. "What do you want of me?" he growled.

The long lashes dropped, masking Thia's eyes momentarily. "I want to help you," she murmured. And the harsh syllables of the dryland tongue were silvery and musical on her lips.

But unreasoning resentment had come to Cliff with the dropping of her eyes. He looked down at his dangling arms. "So that's it!" he rasped, "Pity! You're sorry for a poor crippled Earthling, and you want to help him, do you? Well, listen to me young woman—I don't like the looks of things here and I don't believe in your pretended friendliness. You're the leader of this gang of thieves and killers and you are planning——"

"Stop it!" Thia's voice cut in coldly furious. Black rage had replaced the softness of her level gaze. She threw back her proud head and drew herself stiffly erect.

Then, as suddenly as the fury had come, it had passed. "It's untrue," she said calmly. "All of it is untrue. I have some control over my people, yes, but we are no buccaneers as you imply, nor are our plans of such nature as to merit your censure."

"What then?" Cliff's tone was gentler, though he stood his ground. And his own gray eyes looked steadily into those flashing ones of jet.

"I refuse to answer; it is my prerogative. And now that you have taken this attitude I am telling you—nay, commanding you to leave this place at once and go to Lintarg."

Miraculously, the stern gaze had softened as she talked, and Cliff felt the angry color drain from his cheeks "You—you mean," he stammered, "that I am free to go."

"You *must* go—and quickly." Thia was suddenly ill at ease; nervously apprehensive, it seemed. "But first," she said in liquid, throaty tones, "I must exact from you a promise."

"A promise!" Cliff stared foolishly. This woman was offering him his freedom; his chance to be made whole once more. And he had berated her! "Anything," he agreed huskily.

"First of all you will ask me no more questions concerning myself or my people. Secondly, and of utmost importance, you will reveal not one detail as to our whereabouts here, or Vetter's in Terra, or of the means by which you traversed the distance between the two bodies. For so long as you may remain on the planet Mars, you will not reveal these things. Is it agreed?"

Cliff regarded his disabled members through eyes that suddenly misted, smarting unbearably "Good God, yes!" he husked.

"You swear it by the purple Deity of Henes," tensely.

"Yes, and more solemnly than that." He looked up earnestly now into the soft brown eyes that were so anxiously upon him. "I give you my word of honor as a man—as an American."

"It is more than sufficient. Quickly now, oh Cleef Barron." Turning swiftly then, she opened the door a trifle, peered through the crack, and slipped through into the corridor.

THEY hurried then through endless passages, some smoothly walled and artificially lighted, others rough-hewn in the solid rock, dankly odorous and in Stygian darkness. Where there was light, Cliff was scarcely able to keep up with the scurrying footsteps of his guide; where darkness closed in about them he felt the gentle pressure of her hand on his shoulder, leading him more slowly but just as surely toward their destination. Thia knew every twist and turn of the maze of underground workings.

The way led steadily upward and they had progressed a distance of perhaps three Earth miles when Thia called a halt. A metal-studded door closed the passage ahead of them.

"We have arrived," panted the girl, "just inside the city wall at the bank of Canal Pyramus. The public way above will take you to the central square, where is located the establishment of Lintarg. Henes speed you on your way, oh Cleef."

"Wait!" Cliff experienced a sudden anxiety for her safety and an interest in her he would not have believed possible. "I must see you, Thia, once more; must learn when and how I may see you again. Please tell me."

"You forget, there are to be no questions," firmly.

"True, I promised."

There was the click of a withdrawn bolt and the creak of rusty hinges. The great door swung open and the first lurid light of a Martian false dawn filtered in. Above them the city of Risapar was oddly still; the day had not yet begun.

Thia came out with him to the open air and inhaled deeply of its rare though invigorating substance.

"It is good to be alive," she breathed. "Good to be outside."

Cliff had seen that they were almost at the level of the black waters of the canal and that its steep bank led up from where they stood. But these things made no impression on him at the moment for Thia's gaze was starry in the swiftly improving light of dawn.

"Farewell," she whispered with face upturned, "and Henes be with you always. Think of Thia sometimes——"

"Think of you—Lord! I'll always think of you—and be wishing to see you. If these arms——"

Amazingly then her face drew near. Unbelievably, her lips brushed his. And then, as swiftly as it had happened, she was gone. The door of the hidden entrance clanged shut.

Madly, Cliff dashed his body against the thick moss which covered its outer surface and made it safe from prying eyes. But to no avail. Hardly knowing what he did, he clambered up the nearest stairs to the nickel-cobalt roadway that stretched along the canal. Dazedly he stood there gazing out over the minarets and spires toward the east. Somewhere in the drylands out there beyond the city wall, he knew, was the screened opening through which the space car passed, and beneath it the dome room where Thia soon would sit calmly awaiting whatever adventure it was her people were planning. Dire forebodings came to intensify the new ache which had been so suddenly and unexpectedly implanted in his breast.

A little later, one of the early morning ronsals drifted to a stop before him. The operator yelled sarcastically as he stood staring vacantly into space. Shamefacedly he entered the passenger compartment of the wheelless vehicle. Swiftly rising from the metal surface, propelled and supported a few feet above by the repulsion energies it contained, the ronsal sped toward the great central square of Risapar.

Cliff gave no heed to the kaleidoscopic beauty of shifting colors that played over the multitudinous spires of the city as they whizzed past in the shifting morning light. His thoughts were of Thia and of her association with the drylanders she called her people. He had spent time in the communities of the parched plains between the canals which gave him some knowledge of the inhabitants. Somehow, Thia did not fit in with the pictures he carried in his mind. She was too delicately formed for a woman of the drylands; her creamy skin not at all like the bleached complexion of the drylanders. She was more like the women of the canal cities in every respect—even her speech held something of a slurring accent that was different from those whom she considered as her own.

And yet those in the cavern of the space car appeared to be her loyal subjects. She was a veritable princess among them. A woman who commanded their respect and obedience; one whom they loved. Still she was marked as apart from them. Aloof, superior, different.

Cliff's throat constricted unaccountably as he visioned her in his mind. The memory of her impulsive farewell would remain with him until the end of time. Even now it haunted him . . . and the thought that she was gone from his life. . . .

"Pada-nar!" bawled the operator of the ronsal, glowering back through the glass partition.

Roused from his reverie, Cliff saw they had reached the central square of the city. The ronsal had stopped and other passengers were waiting impatiently. Risapar had come to life; the activity of the new day was in evidence all about him. Hastily the embarrassed terrestrial quitted his seat and flung from the compartment.

Before him towered the slender obelisk-like building that was known throughout all Mars as Tib-Lintarg. A worthy monument to the skill of the great physician whose name it bore. Cliff's heart missed a beat as he viewed it—his hard-earned and much-desired goal.

And then he was sprinting toward the institution like a man possessed. A new urge was upon him; he'd go back to help Thia. Thia, once these crippled arms of his were good as new! He'd return to the secret entrance by the canal and batter down the door. He'd——

"You're Cliff Barron, aren't you?" A stocky terrestrial stood before him, blocking the entrance of the building, a man Cliff had never seen.

"Why—why yes," he stammered, halting his mad dash, "Why?"

"Just wanted to ask you a few questions, that's all," the fellow drawled.

"By what right?" Something warned the young pilot and he was on his guard instantly.

"I'm an operative, League of Terra Secret Service," in low tones.

"You can't question me here."

"I know—not without extradition and all the mess of Martian courts. But don't get sore. I think you'll answer, for patriotic reasons. How did you get here from Earth?" There was a veiled warning in the stocky one's words.

"That's my business." Cliff tried to shove past him.

"Just a minute, young fellow." A heavy hand was on his shoulder. "Ever hear of Carl Vetter?"

"That's my business, too." The young pilot jerked free and went into the building, knowing full well the other dared not go further. And yet he was distinctly alarmed by the occurrence. Someone, somehow, was on the track. And Thia was in danger. The words of his promise flashed across his mind as he entered the cage of the lift. He gritted his teeth. A dozen ronsals couldn't drag that secret out of him.

But Cliff Barron was a sick man, sicker than he knew. The strain of the past few hours had been terrific for a man in his weakened condition and was telling on him now. He reeled as he left the cage at the floor of Lintarg's private consulting room.

A man was there in the reception hall, sitting on one of the lounges, a terrestrial. He sprang to Cliff's side, offering him assistance. Swaying a bit, the disabled pilot regarded with owlish suspicion the man through eyes that saw only a blurred image.

"You another League of Terra man?" Cliff demanded thickly.

"I am," in hushed voice.

This one was leading him to a seat, or trying to. "Well, I'm Cliff Barron all right," he jabbered loudly, "and if you want——"

"Hush," the other warned him.

But Cliff, in his present state, was not to be gainsaid. "——if you want to cross-examine me you're crazy," he babbled on. "I'm here to consult Lintarg and I'm telling nothing to you or to anyone else. Do you get me? Nothing—how I came here, or any other thing about me you may want to know . . . get me? . . . not a word. . . .

And then Cliff Barron was falling forward. He had a confused picture of white-clad figures moving toward him . . . of an alarmed face peering into his own . . . kindly bearded Martian with white coat. . . . Falling, Cliff was, down through the building . . hundred and six floors . . . peace and rest at bottom . . .

Utter darkness swooped down upon him. Nothingness.

CHAPTER IV

Betrayal

A LONG-DRAWN musical note, vibrant and mellow. Grateful warmth that penetrated deep into the tissues, stimulating muscular activity, setting the pulses athrob, revitalizing bodily functions long dormant. The tang of ozone, like sweet mountain air filling the lungs. Light-images, hazy and unstable at first, resolving into clear-cut forms of things animate and inanimate . . . substantial and real. . . .

Abruptly, Cliff Barron knew he was in the land of the living.

The musical note slithered down the scale and trailed off into silence. Cliff drew in his breath sharply; looked down at his nude body. He was standing on a metal plate that glowed with pale rosy light. His flesh was firm, his skin healthy. His hands—he moved a finger; spread all ten fingers wide. His arms, no longer withered and rigidly twisted—he flung them wide with sudden vigor.

A choked sob rose in his throat.

He looked up slowly and reverently into a smiling, gray-bearded face. Lintarg. Other white-coated Martians were in the room—a room of crystal walls and weird apparatus. All the white-coated ones were looking at Cliff, watching him intently as one watches the subject of a laboratory experiment—for untoward reactions. All excepting Lintarg. The great surgeon's gaze was confident, friendly and sympathetic. Cliff tried to speak and couldn't.

It was no less than a miracle, this thing that had been done by the famed healer of Risapar. A man made over. A healthy, normal human being made from a physical derelict. A wreck salvaged.

Cliff extended his hands and turned them palm upwards. Wriggled his fingers as an infant, when first cognizant of the strange appendages, wriggles its toes. Impulsively, he stretched those muscular new hands of his to Lintarg. Gripped him mightily. Said not a word.

A little later, when Cliff had mastered his emotions, a flood of questions clamored for utterance. The staff physicians and attendants had quitted the laboratory. He was alone with the great Lintarg.

"Tell me doctor," he demanded, "Am I entirely fit and well?"

Lintarg's round eyes twinkled behind his spectacles. "You feel fit, don't you?" he countered.

"Never better. But I don't understand; my lost weight has been returned; my senses seem more acute—everything. I am a new man——"

"You are precisely that, Barron. And wondering about it all, I am sure. We will discuss it in your room. Here—cover yourself and come with me." Lintarg tossed him a light robe.

In the small bare room with the high white bed, Cliff hugged himself and grinned like a boy. Rising to his toes and with legs rigid, he bent double and touched the tips of his fingers to the floor.

"Here, here," Lintarg, behind him, reproved, "None of that, young man. You are to take to your bed at once."

"Bed"—blankly. "Why, I feel——"

"Precisely; you feel like dancing and singing and being many fools combined in one. Nevertheless, you are going to bed—a night of real sleep is necessary after your experience. Normal sleep."

To Cliff it seemed he was in condition to tackle a dozen wildcats then and there. But he yielded to the great physician; stretched flat under the covers with arms outside where he could see and gloat over their easy movement, their muscular——

"You are a fortunate young man," Lintarg pronounced, interrupting his thoughts, "Extremely fortunate."

"I'll say I am." Cliff looked up into the grave round eyes and a wave of deep gratitude swept his being. Gratitude he could not hope to express properly. "I can't tell you, sir, how much——"

"Forget all that." Lintarg's voice was gruff, but understanding was in the round Martian eyes. "The thing is done, and you will be discharged in the morning. Meanwhile, as I am a very busy man, I must bid you farewell. It will be impossible for me to see you tomorrow. So good luck to you, my boy."

"Wait sir; tell me how—what——"

"Yes." Lintarg glanced swiftly at the huge Martian chronometer he drew from his pocket. "Yes, of course, you will not remember it. You fainted in the hall, Barron, and we brought you at once to the operating room. It was none too soon. Of the operation itself I shall speak little, as the details are highly technical—the repair and rejuvenation of certain motor and sensory nerve centers—you may hardly expect to comprehend. Then followed five days of intensive treatment, healing scars, building up tissues, and strengthening the weakened organs by means of curative rays. Electrical, you understand. Systematic exercise, proper dieting—it is, after all, quite simple."

"Five days!" Cliff stared. "And I know nothing of it—this was all done while I remained unconscious!"

"Precisely; it is the Lintarg system. We keep the patient's mental processes entirely dormant during treatment, in order that there be no possibility of conscious or subconscious resistance of the mind. Ninety days of convalescence are thereby accomplished in five days of time. Is this all clear to you?"

"Y-yes." It wasn't clear, but Cliff had a vague understanding of what they must have done to him.

"Then—truly—I must be leaving you." Lintarg moved to go.

"Your fee, sir——"

"All taken care of by your benefactor, and your letter of credit is intact as well. I repeat, you are a fortunate young man." The surgeon was fidgeting; anxious to be gone.

"Oh—I'll not keep you sir. Thanks—it's all I can say—I——" Cliff swallowed hard; extended his hand—the firm strong right hand Lintarg had given to him.

The Martian gripped it, smiling. "Henes be with you my boy." And then the great Lintarg was gone.

CLIFF lay for a long time thinking. Moving his fingers one by one, trying each in turn. Flexing the muscles of his arms. Peering at the remade members as if they belonged to another man. Marvelling.

He thought of what Lintarg had told him. That sealed letter of Vetter's had taken care of the great surgeon's face—large fees, too, they must be. Vetter had done more than he agreed. Good old Vetter, whatever his connections with those drylanders. . . .

Abruptly Cliff Baron sat up in his bed. Memory of Thia smote him like a blow. Five days! He had been out of the picture five whole days while she was in danger of unknown nature. But serious danger. He remembered the League of Terra men. They were on Thia's trail—or Vetter's. After the whole gang probably.

He jumped from his bed. Stay here over night?—not if he could help it. He rushed to the small closet in a corner of the room; saw his clothing hanging there, neatly arranged. In a panic of apprehension, he dressed more swiftly than he had done in his lifetime.

Flinging open the door, he came face to face with a nurse. A round-eyed Martian girl, stolid of features and severely prim in the starched white uniform of her calling.

"Henes!" she gasped. "The patient is mad. You must return to bed instantly, Earthling."

"Nonsense, woman!" Cliff brushed past her and strode down the hall. "I'm as well as any man in the city. And I'm going away from here."

The nurse pattered after him, clutching at his arm. He shook her off. An orderly, a great bleached-skinned hulk of a drylander, came from a side hall, blocking his way. Cliff flung him aside as if he had been a child.

He was in the outer office then, marching past the astonished and protesting registrar into the reception hall. Other orderlies came running, but these fell back under his grim threats. A lift stopped at the floor; the door opened. Cliff flung himself inside and was whisked away to the lower regions.

Reaching the main entrance of the building, he looked out over the central square of Risapar with satisfaction. The city was in darkness save for the twinkling cold-white lights of the square and the roadways. The pedestrian ways and moving platforms were almost deserted. Cliff drew a breath of relief and stepped out between the great columns of the portal.

And then he was stopped short in his tracks by a sound that came to his ears. A sharp click, directly behind him, followed by a whir as of some swiftly rotating mechanism. He wheeled about to look into the grim visage of the Secret Service operative who had first accosted him and into the violet glare of light that sprang from a pistol-like contrivance that was thrust in his face. A languorous, numbing sensation flashed over his body and his knees sagged.

"Now you'll talk, buddy," the operative growled. "Get down there to the corner where you see that small private ronsal. Quick!"

Everything within him cried out against it, but Cliff was without power to refuse. The wily operative was using a hypno-ray, one of those devilish contrivances that rob a man of his will and render him utterly subjective to the will of another. Like an automaton Cliff faced about; as in a dream he walked jerkily to where the small ronsal was waiting at the roadside.

The second operative, the one he had seen in Lintarg's reception hall, was inside the ronsal. The one with the hypno-ray backed Cliff against the side of the vehicle, in the shadow.

"Now!" he snarled, bringing the violet glare closer, "You'll tell us how you got here from Terra. Make it fast, young fellow."

Cliff shut his eyes, endeavoring to blot out the violet glare that had him in its power. But to no avail. He struggled mightily to clamp his jaws tight that his lips might not speak the words. But in his consciousness that other will was beating his down—a will inferior to his own had it not been supplemented by the fiendish energy of the violet glare. Mechanically his voice repeated the fatal words:

"Carl Vetter's space car . . . hurled across void in less than an hour . . . projector of car in cavern deep in mesa . . . Arizona—in desert . . . due south of Tuba City. . . ."

"Enough." The violet glare was extinguished.

Cliff had vague knowledge that both operatives were now in the small ronsal. He heard the faint whine of the vehicle's starting generators; battled desperately to regain control of his own movements. But too late he succeeded. With a swift rush the wheelless cab had risen from the nickel-cobalt roadway and lurched off into one of the express traffic lanes. By the time his brain had cleared of the hypno-ray's influence, it was lost to his view.

The stark awfulness of the thing he had done smote Cliff with overwhelming force. He had betrayed Vetter, his benefactor; he had broken his solemn promise to Thia. Thia the beautiful, the impulsive, who was in such grave danger. True, he could not have helped it—it was impossible for man to fight the energies of the hypno-ray. But that made the thing none the less calamitous.

He rushed shouting into the square, to a waiting ronsal of the public transportation system.

OF the swift ride along Canal Pyramus toward the city limits he took little heed. At the back of his brain was hammering the dread certainty that he would arrive too late. Even now the word was being flung earthward through the ether—agents of the Secret Service would be at Vetter's laboratory in the mesa within an hour.

Lucky he had not been asked any details regarding the Martian terminal of the space tube. If Thia were still there, she at least might be warned. If she had gone to Earth . . . Cliff shuddered.

Sykes had done this thing, smugly complacent Leonard Sykes, who had refused Cliff the chance Vetter later gave him. Sykes, somehow, had learned of Vetter's space tube. Unable to locate it, he had used his vast wealth and political influence to corrupt even the League of Terra Secret Service. And now he would ruin Vetter. Thia, whatever her secret connection with the project, was in danger of exposure—perhaps of death. There was a mystery here, of course, in the Risapar terminal of the space tube—shady dealings, maybe, between Vetter and these drylanders of Thia's. No matter. They had given Cliff his coveted chance of recovery and he was throwing in his lot with theirs.

The ronsal stopped at Cliff's destination. When it had slid off into the night he clambered down the stair to the lower level of the canal bank. How different from when he had staggered up these same steps with useless arms dangling!

By the dim illumination of the flickering lights above, he made out the approximate location of the hidden entrance of the underground passages which communicated with the cavern of the projector. It had remained indelibly written in his memory.

Then he was tearing at the thick moss of the sloping bank with his fingers. It resisted with the toughness of leather. Desperately he cast about for an implement. The iron rail of the stairway—he tore away a six foot section of its length as if it had been the lightest of bamboo and attacked the thick moss violently.

At length he had located the door frame. Of smooth metal, it was, and entirely unyielding. Between the strapped and studded wood of the door itself and the frame was not the smallest crack into which he might insert his improvised crowbar. But he located the outer plate of the lock eventually and went at it with the fury of a madman, his iron bar used as a battering ram.

He looked up anxiously to the pedestrian way at the top of the bank, fearing the din was attracting attention. But no faces peered down at him as yet, and he went back to his task with renewed vigor.

Presently there was the snap of metal inside. The door yielded slightly. An inch, two inches. The iron bar crashed home again and again. Then, suddenly, the door swung inward, creaking protestingly, and Cliff was in the dark passage.

He ran frantically, blindly, bumping heavily against rough-hewn walls as he lost his sense of direction in the darkness. He came out into lighted passages that seemed familiar, yet gave him no indication as to whether his was on the right track. Into the darkness again and again, feeling his way, stumbling and panting, scratched and bruised by many contracts with the jagged stones of the passage walls.

It was a hopeless task, finding his way in the labyrinth of dark tunnels and lighted ones that were equally unfamiliar. He shouted occasionally, pausing to listen for replies. But none came.

God!—if Thia had gone! Or, if, even now, she was on her way to Earth in the space car . . . what fate awaited her at the other end of the tube? Cliff could only imagine, and, imagining, he conjured up in his mind the most frightful of possibilities.

And then, amazingly, he had come out into the cavern of the space car. He saw that operators of the projector were at the controls. Instructions were being called out by the observer at the radio telescope. And, on the landing platform at the entrance manhole of the car, was Maranu. Thia, in a boyish leathern garment, was entering the bullet-like vessel of the heavens.

"Stop!" Cliff was yelling as he ran toward the platform. "Wait, Thia—they know!"

But the girl was already inside, and Maranu faced him with an ugly leer as he mounted the platform. "She can't go, you fool!" Cliff gibbered, "Don't you understand? Terrestrial Secret Service—they will be waiting at the other end. The car must stay here."

Maranu's eyes narrowed. His burly form blocked the entrance port of the car. "So!" he rasped, "You think it must stay."

Cliff was upon him then, bearing him to the floor. In a flash he had crawled over his prostrate form and was in the airlock of the car. There was a yell from outside and the port cover swung home with a crash. Cliff heard the jangling of the bolts as it was fastened to its seats. But the import of this did not impress itself upon him then. He was too intent upon his quest of Thia.

"You monster, you've killed them!" Cliff heard Thia's voice beyond the door of the passenger compartment.

Bursting through, he halted in amazement. She was facing Carl Vetter, a new Vetter with disarranged hair and staring eyes in which bloodlust gleamed. His fingers clutched the butt of a flame pistol and a heap of bodies was on the floor—bodies of the drylanders.

"You've been killing them all," Thia moaned, "And now you want to kill me. Oh, you vile traitor——"

"What's this?" Cliff yelped in amazement.

Thia turned swiftly and threw herself in his arms—those new strong arms that closed protectingly about her.

"You!" Vetter exclaimed, falling back. His face paled to ghastly whiteness. "You! And completely recovered."

"Yes, me, Vetter. What's the idea?" Cliff still was unable to credit his senses. That a man who had done the thing Vetter had done for him should be engaged in what was evidently nefarious business, was incredible. A murderer—Vetter? Impossible.

The buzzer shrilled viciously. They are sending the car across!

Vetter had recovered his equanimity and was raising the flame pistol. A maniacal gleam had come into his eyes.

"Stop!" Cliff snapped. "They're wise—at the other end. Waiting for you—the authorities."

"Wha-a-at!" Vetter lowered the muzzle of the pistol.

Again the buzzer shrilled—twice. They were speeding the start.

Cliff swung Thia in his arms and deposited her in one of the hammocks. Only one minute before that awful pressure——

"No!" Vetter snarled. "She must die!" He flung up his arm with the pistol trained upon her.

Cliff sprang swiftly in a flying tackle, wrapping his arms about the big man's knees and bringing him to the floor with a terrific thud.

"Cleef! Cleef!" Thia was screaming. "Quickly—into the swing."

Vetter had struggled to his knees when Cliff threw himself into the nearest hammock. Murder was in his eyes and he raised the flame pistol toward Cliff, cursing. Truly, this was a new Vetter.

Then came the shuddering vibration of the car, the terrible pressure of acceleration. Cliff was pressed gasping into the cushions as the space car lurched off into the heavens.

Vetter's scream of agony rose high as he was crushed to the floor-plates. There was the sharp snapping of his bones; weak whimperings gasped painfully. Vetter had paid the penalty of his perfidy.

Still the awful pressure increased, driving Cliff deeper into the cushions with every passing second. He tried to move, tried to raise his voice in words of comfort to Thia. It was utterly impossible. His vision lapsed under the smashing pressure; his breath came short.

There was silence in the speeding car, save for the throbbing of the pumps that supplied the oxygen they breathed. On the floor there were the dead drylanders—and Vetter. In the hammocks two living beings; inert; helpless.

At the end of the journey—what?

CHAPTER V

Understanding

After endless time it seemed the pressure of acceleration had eased slightly. Still Cliff was unable to move. But his brain was active and he pondered the strange situation.

What was this thing Vetter had done? Evidently there had been a plot to carry these drylanders of Thia's to Earth. Perhaps they were the piratical crew Cliff had thought. Perhaps Vetter, discovering this, had been slaying them as they entered the space car one by one. A qualm assailed the young pilot as he thought of his benefactor—a crushed mass there on the floor beneath the hammock.

But Vetter had intended to kill Thia; would have killed Cliff had not the space car leaped into the heavens in the nick of time. And Thia was in no way responsible for whatever deeds of dishonor might have been contemplated by those she called her people. Cliff made up his mind on that point. She was too essentially feminine; too much of the tenderheartedness of womankind was in her makeup. She was the very personification of the ideal Cliff had always secretly cherished. Too *human*, though her eyes might flash fire when anger overcame her. A delectable and desirable creature. . . .

The pressure *was* easing. Cliff found he could roll his eyes and that breathing was somewhat less difficult. But he was as yet unable to move his limbs or to speak. He assumed they had reached the mid-point of their journey and that deceleration had commenced for the long gradually slackening dash to Earth.

What was to become of them there? Cliff swore a mighty oath to himself that he'd battle for Thia against them all. Against his own world: against all Mars, if need be.

Definitely now, the pressure was less. He moved his legs and arms slowly and painfully. "Thia!" he managed to gasp.

"Y-yes," after anxious moments.

"You all right?"

"I—I am." A sob was in the girl's mellow voice.

The pressure suddenly was released entirely. Cliff made a move and was astonished to find his body drift out of the cushions and away from the hammock. Weightless! In a flash he understood what had occurred; the receiving tube of vibrations from Earth had been discontinued. They were drifting in space, helplessly entombed in a closed vessel whose oxygen supply could last no more than ten hours—doomed.

"Thia!" he groaned.

Pushing against a stanchion of the hammock support, he drifted over to where the girl lay motionless. His fingers twined with hers.

All else was forgotten as instant revelation came to each that the other cared. No whispered words were needed, no stereotyped avowals. They *knew*. And, knowing, were speechless—forgetful for the moment of the hopelessness of their position.

"You understand what this means—the stopping of the space car?" Cliff asked gently, after a while.

"Yes—I know. We were let loose at the point where the transmitting and receiving tubes met in space. Something happened to cut off the power at the terrestrial station, and we are adrift. We shall die together, Cleef." Desperately, Thia fought back the sob that was in her throat.

To find happiness, undreamed-of happiness, and then to lose it! Cliff swallowed painfully, taking her in desperate enfolding arms as if by their new-found strength he might save her.

The pumps throbbed softly in the adjacent compartment.

* * *

Presently they were talking of other things. Resigned to the cruel fate, they would at least pass their last hours together in sympathetic understanding—and in sanity. Resolutely they turned their thoughts and conversation from the future, which might have been theirs, but now could never be.

And many things which had been puzzling Cliff became clear to him as Thia spoke of her past life.

As he had suspected, she was no drylander. Pampered, orphaned daughter of an influential patrician of Risapar, she had fled to the drylands two years previously to escape a distasteful marriage about to be forced upon her by the Eugenics Board of the Canal Cities Union. She reached the City of Diamonds, the walled city of fabulous wealth that lay in the drylands only a few miles from Risapar. And here she found refuge.

A plague visited her new home, decimating the population of the City of Diamonds and striking terror to the souls of all who dwelt within the city walls. Thia had been an angel of mercy, working day and night with the physicians, organizing squads of nurses, and herself going into the homes of the afflicted and ministering to them.

Thia passed swiftly over this phase, but Cliff was able to learn that the survivors, mostly males and only a few hundred in number, had set her up as their new ruler. This they did in gratitude and in real appreciation of her organizing ability.

Then had come a demand for tribute from the Canal Cities Union. Her people had refused and had taken to the diamond mines and the maze of passages underneath their city, blasting the entrances shut to hide themselves from the militias sent against them.

Outlawed by the authorities and their lives forfeit, they had dwelt underneath the surface. Eventually they explored connecting passages and came upon the retreat of Vetter and his companions in the space tube development. They had bargained with Vetter to convey them to Earth and he had agreed to do so for a vast fortune in diamonds that was offered. But none of the drylanders would risk passage in the car until a man of sufficient courage, or sufficiently desperate, might be found. Thus Cliff had come into the picture.

Thia had successfully concealed from her people the fact that Cliff had escaped, and they had spent the past five days sending them across to Earth in the tiny bullet-like car. But today, with most of them gone, Thia had become suspicious. Maranu always guarded the entrance and her people had gone into the space car singly. And on Maranu's cruel face there was always that sinister smile. And today had come Thia's own turn; she had entered the car and had learned what had been happening . . . Cliff himself had seen. . . .

She shuddered as she glanced at the heap of corpses. Stirring they were, in their weightlessness. Shifting position eerily.

"Lord!" Cliff muttered. "You think Vetter killed them all? Every trip was the same?"

"I do; I am sure of it."

"Why—in God's name why?"

Thia's eyes darkened to jet. "Maranu!" she whispered. "He and Vetter sold out to the Canal Cities Union. For additional payment of gold and precious stones they became the executioners—they——"

"Vetter—did—this!" Cliff marveled. "After what he did for me with Lintarg. How could he? I'm glad I gave the thing away."

"You—gave what away?" Thia's eyes were wide upon him.

He told her swiftly of how he had been forced to tell of Vetter's Arizona retreat.

"You were not to blame," she exonerated him. "But, Cleef, I do not understand—these Secret Service—why should they care?"

Cliff told her bitterly of Leonard Sykes, his rancor returning. At least he had the treacherous murderer Vetter to thank for Lintarg——

"Hush—what was that?" Thia interrupted him.

There was the sound of metal contacting with the shell of the car somewhere about the entrance port. Their bodies drifted toward that side of the vessel. Some object of considerable mass had approached them, bringing this simulation of gravitational force by its attraction. A heavy thud followed and the space car lurched violently.

"A rocket ship!" Cliff exulted. "We're saved, Thia, we're saved. It could be nothing else out here—nothing but a space liner."

Choking with emotion, he held her fiercely close.

The sound of heavy footsteps resounded on the shell of the space car. Men in vacuum-tight apparel were out there making a rescue connection. In a few minutes they'd be inside.

Cliff's jubilation gave way to swift realization.

"Thia," he husked. "They'll take you. By the treaty between the Canal Cities Union and League of Terra your return will be demanded."

"They'll take you, too, my Cleef," sadly, "for you will be considered as an accomplice. There is evidence that Vetter sent you to Lintarg—he paid——"

Cliff grabbed up the traitor's flame pistol from the floor. He'd not let them take her! Better to die here together than that——

The entrance manhole was open and someone was coming through the airlock. A vacuum-sealed connection had been established with the rescuing vessel.

"Chet!" exclaimed Cliff as a square-shouldered, smiling youngster came through the door, "Chet Andrews, by all that's good and holy!"

Andrews, his bosom pal in the old day—pilot of the H-4—good old Chet was here!

"Yeah, it's me." His friend drifted near, pulling himself along from stanchion to stanchion. "Put away that thing," he grinned, eyeing the flame pistol, "We're taking you aboard, you bonehead."

"No!" Cliff was suddenly panicky. "You don't know, Chet—Thia here—they'll return her to Mars. There's a death sentence——"

"Such boneheadedness!" Chet continued to grin. "You don't think we'd stand for that, do you? Your old pals? Not much."

"Sure there's a way out?" Cliff set the pistol down.

"Sure—absolutely—come on."

Though he saw not how, Cliff believed him. Holding fast to Thia, who helped as best she could in the awkward absence of appreciable gravity, he made his way through the airlock after Chet.

IN the artificial gravity of the H-4, they moved naturally again. Chet was chuckling with glee as he led the two toward the master stateroom of the liner.

"Got a surprise for you, Cliff," he boasted.

"What?"

"Wouldn't you like to know?"

And then they were inside the room and Cliff was staring incredulously at a pudgy, smiling man who sat by the library table. Others of Cliff's friends were grouped about the man—Davis, Trent, Thomas. But Cliff had eyes only for the pudgy one and mad rage surged up in him.

"Leonard Sykes!" he bellowed. "You dirty swine!"

He plunged forward. More double-dealing, he supposed. Well, at least he'd have the satisfaction of repaying Sykes——

"Easy now!" "Cut it out, pilot!" "Don't be a bonehead!" The soothing words of friends were in his ears as they hemmed him in, holding him off from the man he intended to pulverize. Thia had drawn back against the wall and stood staring.

"Let me at him!" Cliff yelped, "I'll mop the floor with him. You know what he did?"

"Yeah, we know what he did," Chet Andrews drawled, thrusting his face close to Cliff's and hanging tight to his wrists. "He fixed you up, that's what he did. Fixed things with Lintarg—Sykes did, not Vetter—don't be a bonehead all your life."

"Sykes—did——" Cliff let his arms fall weakly at his side and moved to a chair, where he sat down dazedly. He stared at his former employer, who continued to smile. "Is this true, Mr. Sykes?"

"It is, my boy." Sykes' gaze was frank, kindly.

Cliff hunched himself dejectedly where he sat. It seemed as if he had been seventeen kinds of fool. "I—I'm sorry then, Mr. Sykes," he stammered. "I've been thinking all this time——"

"I know what you've thought," returned Sykes, "and small wonder. I'll explain, if you will listen."

Cliff listened. The matron on board had taken charge of Thia and he gave his undivided attention to what the financier had to say.

"Barron," Sykes told him. "I had to do what I did—refuse the very reasonable request you made of me. Two Secret Service men were in the next room and I was acting in accordance with instructions. A serious situation had arisen between the League of Terra and the Canal Cities Union—what amounted to a threat of war. In some manner the Martian Union had learned of Vetter's machinations, though they could not locate his apparatus on Mars nor could they find the condemned drylanders he was negotiating with. But their spies in America had the information that he intended to approach you, Cliff, in the matter of the trial trip. And they put it up to our Secret Service to trail you to Vetter's lair, using you as the bait with which to trap him. But his autogiro was too fast for their antiquated ships and they lost him. Hence came the attempt to get information from you by others of their number before your operation. Here again they blundered, or you outsmarted them, but finally they succeeded in locating Vetter's plant in Arizona and shut off the power there."

"Yes, they succeeded all right," said Cliff dryly. "But you, Mr. Sykes, how did you come to be out here? And how do you know all this?"

"We came out at once after you had left my office. I suspected what Vetter was up to, as he originally stole this invention from an old crony of mine. He worked on your resentment against me and on your former disability to get you to make this trial he dared not make himself. He was crafty, Vetter was."

"I'll say so!" growled Cliff, a light dawning on him. "Then Vetter didn't——"

"He did not," Sykes interrupted. "The letter of credit he gave you was forged; the supposed letter to Lintarg only blank paper. He had counted on Maranu to make away with you when you arrived, but Maranu failed him, I take it, on account of Thia's intervention."

Cliff nodded.

"But I have agents in Risapar, Barron, and I kept in touch with them by etherphone. They arranged everything with Lintarg, even to the new letter of credit—and kept their mouths shut, too."

"Then you, not Vetter, did this—for me!" Consumed with chagrin, Cliff listened as Sykes went on with the story.

Though he did not know the location of Vetter's projector, Sykes did know of the existence of the space tube. He had come out here in anticipation of just such a thing as had happened; had hovered in space with the H-4 midway between Mars and Earth, hoping to rescue anyone who might be set adrift in the space car. He had kept in touch with the situation by means of etherphone conversations with his agents on both Earth and Mars. And here he was, Johnny-on-the-spot!

Cliff could restrain himself no longer. He pleaded with Sykes for forgiveness. Murderous rage had been in his heart, and misunderstanding. But Sykes would have none of his apologies, and his old buddies made sport of his embarrassment. It was good to have friends like these!

A LITTLE later Thia returned with the matron and came at once to Cliff's side. He observed with pride the admiring, envious glances of his buddies.

"And what about us, Mr. Sykes?" Cliff asked, drawing Thia to him. "This girl can not return to Mars, you know."

"Nor to Earth." Sykes' gaze was solemn. "As far as that goes, Barron, you are no better off yourself. Both of you are exiles. You must know the status of diplomatic relations between the League of Terra and the Canal Cities Union. Even though there was double-

(*Continued on page* 355)

Disdainfully the harmless-looking cigarette case was thrown into the pit to the prisoner who made it his last request.

North of Matto Grosso

By Bertrand L. Shurtleff

SCIENCE professors are, generally speaking, an ethical lot. It's not particularly strange, therefore, that they are often simple and credulous. Spending a lifetime in the deep study of some particular experiment does not tend to make one worldly-wise or crafty. That is why such occurrences as are depicted here as having happened in certain unexplored sections of Brazil are possible, and even easily conceivable. The heroes of this story—for there are two—handled the situation most ingeniously, as did the author the tale.

Illustrated by MOREY

BILL AMES just drifted out of my range after the Big Adventure. I was tired of cloud-hopping, after fooling around with the Jerries, and ready to settle down to earth, but Bill couldn't be happy without the feel of a crate under him and a spice of danger in the job. That was why he turned up his nose at commercial flying. The last I had heard of him he was supposed to have been lost on some crazy mapping adventure up in the reaches of the Amazon.

Then some fool reporter ran my picture in the *Times* with an account of the work we were doing at Schenectady. I was plenty sore, not liking that sort of ballyhoo any better than the letters and telegrams that came sifting in on the heels of the yarn from a crazy lot of youngsters who thought our experimental work was the career for them.

The rush had died down and I was breathing normally again when his wire came. It was a typical Bill Ames trick. No explanations, no details. Just his address in Rio and the words:

BARREL ROLLING.

I was packing my bag ten minutes later and explaining to the wife that it was a mighty serious matter, that an old buddy of mine had sent the grand SOS and I must hop for Rio *via* the fastest method to be found.

She held out against flying but you can imagine what happened. Bill and I had used those words to indicate trouble. When either one of us went into a barrel roll it meant plenty of action for both. A message like that, so long after we'd separated, could mean but one thing. He wanted me and he wanted me in the customary hurry.

So I promised the wife that I'd take a boat and compromised on an amphib, although I knew she meant a steamer. Before a train could have dropped me in New York, I was pulling away from the field and before the next boat was scheduled to leave, I had crossed Cuba and the Caribbean and was well on my way over Venezuela.

I guess it was lucky I did, for Bill was up to his ears when I finally set the old wagon down on the field at Rio. The face he turned to me was older and full of trouble, but it lighted at sight of me. Then I was out of her, cramped limbs and all, and pumping his arm for all I was worth and wondering how a man could grow so gray and seamed in so short a time.

Somebody must have wheeled my crate away and left us gabbing there, for the next thing we sensed was the roar of a motor suddenly close to us and coming closer.

Bill knocked me flat with a sweep of his arm and fell on top of me as a plane shot madly past, one wing swinging over us with a murderous swipe that must have done us plenty of damage if we hadn't dropped. Even as we picked ourselves up and dusted off our clothes, it turned and taxied slowly toward us.

My jaw dropped at sight of the face that peered out at us. I wondered instantly about the sincerity of those words of apology that lamely sought to explain how a gust of wind had caught the bus as he started to lift and thrown her at us.

"OK, Stein," grinned Bill, although I knew by the curve of those lips that everything was far from right between them. "Accidents will happen."

The name clinched my conviction that the incident had been no accident.

That smiling fiend was none other than Killer Stein, the Jerry who had sent us earthward the day we joined the caterpillar club. But the Killer had not been content to ground us. He had followed us, after our chutes opened, pouring a steady fire at us, as though intent on letting no living thing escape. Looking at him as he lifted his goggles and saw us rise, I recognized the same baffled expression that I had seen, years before, over Flanders. Little things like that stay with you out of a big experience and I had awakened many a night with the memory of those fiendish eyes bringing a cold sweat as I re-lived those moments again and again when it had seemed an eternity before the rest of the formation finally cut in and drove him away.

"Killer Stein here and making trouble for you?" I gasped, as the bus turned and quickened for the take-off.

"Commissioner Stein, in charge of national aviation," sighed Bill, scowling after him. "The man that sent me into this barrel roll."

No more about that until I had tucked away my allowance of grub and begged for twenty or thirty hours of sleep.

"You can sleep in the air," said Bill, shaking me violently. "Get an earful of what's ahead."

Unless you've tried non-stop flying you won't understand my state while I'm trying to get his woe. Toothpicks propped under 'em wouldn't have held my eyelids open, I'm that sleepy, and my head made my neck feel like a wilted flower stalk. But I caught snatches of it between nods.

"You married?" he asks, right off the bat.

"Do I look it?"

He nodded solemnly, then started shaking his head. It seemed to me that his shoulders dropped a little, as he half turned away.

"Maybe it's the trip," I chuckled. "They always said at home it didn't show. There bein' no kids and none anticipated, we sort of went fifty-fifty. The little woman is working and capable of taking care of herself.

Bill started to grin and then his face went gray. He shook his head stubbornly.

"It's no use, Ed," he muttered. "I thought you'd probably stayed single like myself. If there was nobody to give a damn, as in the old days, I was hoping you'd come along."

"I'm coming," I said without hesitation. "The wife was getting sort of tired of me," I lied, "and anyhow I had an agreement with her from the start that I'd drop everything and scoot, if you started barrel rolling."

That second half was just as much fiction as the first but the sight of that Killer had stirred up a lot of memories and brought to mind a lot of idle wishing I'd been indulging in for years. Anything that promised to help my old buddy out of a hole and, at the same time, would bring me into battle against that meanest of German aces was worth a dozen lies.

"You did, eh," grins Bill, rolling himself a cigarette as he slipped me the makings. "Always remembered that signal. I had much the same idea when——" His jaw muscles worked in that peculiar way they had when he was trying to bite off something he hadn't meant to say and he swallowed the rest with a gulp while he fished for matches.

"I'd fight anything or anybody anywhere for you or good old democracy or any other good cause. We bucking the commissioner?"

Bill sucks in a chestful of smoke and lets it slither out of his nostrils, eyeing me in that testing manner of his that had always made me feel like a big kid caught asking too many questions.

"Argus was as blind as a bat compared to some of these babies in Rio," warned Bill at last in a mutter, "and they hear more than they see. There's a rumor of trouble with Bolivia and Peru again over boundaries and a word against our weasel-eyed friend could easily be construed as treason and an excuse for a firing squad. Button the old yap and keep it thus."

Getting spanked down again like that made me just as furious as it did in the old days, but I was too tired to show resentment and I must have been snoring when Bill reached over and shook me again.

HE started at once to narrate how he'd been reported lost. He was mapping the country by plane for the rubber interests and the government. That was what brought him to Brazil in the first place and I gathered that it was Señorita Huena who kept him there.

They had gathered six army fliers from as many nations, after the armistice had dumped them back on civilization, and some fool in charge had paired Bill with Killer. This much I got and then I only caught snatches between nods.

The system evidently depended on a single plane for each section with one man mapping while the other piloted. Bill and Stein had worked south from the big river, covering Para right on down to the Plateau of Matta Grosso. At least that was their assignment but they never quite covered it.

Killer was the only German connected with the whole thing but he seemed to have influence. Bill sensed it and felt that there was something afoot.

He waved me wide awake to watch his finger as he pointed to a big map he unfolded on the table. "See this section here? Not a single village or town in between those parrallels 50°—55′W. and 5°—10′S. Nothing on the Xingu south of Alta Mira and nothing eastward to the Araguaya nor westward to the Sao Manoel or Las tres Barras and the Tapajos. Lonesome stretch in there."

Just what he suspected didn't come out in his recital but he had been suspicious of Stein. The German had been trying to cover something and insisted on working alone through the central part of their assignment.

When Bill resented this, the Killer pretended he was trying to save him exposure and hinted that Bill was feverish.

It wasn't long after this that he did feel a touch of sickness. His partner gave him a dose of medicine that didn't taste like quinine and rolled him up in his netting on a scaffold they had built on the roots above the swamp.

He was sort of hazy about what followed. He really was sick and had long dizzy spells and couldn't tell night from day for the periods of blackness that shut in and closed out the world for him.

But he did have some quinine left in his pocket and he ate that and drank the last few drops of water left in his canteen and somehow worried along, hoping Stein would be back before his thirst killed him or drove him to drinking the Xingu.

Stein didn't come. Bill lay there, weak and exhausted, for a long time. Then some Indians found him and nursed him partially back to health, passing him on down the river from one set of paddlers to another until he reached a white outfit and was shipped out.

Stein had been courtmartialed but crawled out of it with a long story about attempting to do the work of two men and nearly killing himself in the terrors of the impassable region, while a shirking partner crawled away *via* the river to safety. The story sounded fishy but that same mysterious influence that Bill had felt earlier in the mapping venture seemed to work to bring the Killer more credit than blame, so he was eventually appointed commissioner of aviation.

"And nobody has since been allowed to fly over that section," said Bill angrily.

"Why?" I asked sleepily.

"That's what I've been trying to find out ever since. That's why I stayed—that and Señorita Huena."

It seemed that this little señorita was a stunner and she had put the old sign on Bill from the minute he clapped eyes on her. She was the daughter of the man in charge of the mapping venture and she had taken to planes with all the enthusiasm of a spoiled young beauty dying of boredom with a sudden influx of gallant aviators ready to teach her how to do thing.

It had simmered down to Bill and the Killer after a while, with Bill losing in political favor but gaining in hers. Then, with the wedding day all named, she had gone out for a long solo and just disappeared.

Bill had an idea where she had gone but it didn't help him any to insist that she'd taken a swing over that forbidden five-and-ten, fifty-and-fifty-five. Stein wouldn't hear to it and wouldn't allow a ship in there.

Hers wasn't the first one to disappear in that direction. Two young Yanks, touring South America by air, had asked permission to cut across there on a long hop and had been strictly admonished by Commissioner Stein against attempting anything of the sort. They had finally agreed to swing off their course to avoid the dangerous section of bumps and pockets that Stein had reported as existing there. But they had been reported by three towns along the Tocantins as heading for the forbidden region and then no one had ever heard from them again.

"I got orders to keep away from there myself, on the way down," I nodded. "Reported full of hopeless trouble and no landings."

"That's Commissioner Stein's story and he's going to stick to it but I know that there are open stretches along the Xingu where a flying boat could land with ease. I know because we did it. I never saw a sign of this dangerous flying he reported, other than the customary mists you expect over river jungle. There's something there that he's aiming to keep hidden and it must be mighty important if he won't let a reckless old army flyer in there to hunt for men and women who are down."

I tampered out the limp cigarette, mute testimonial to a forgotten art of making, and asked, "How long this girl been missing?"

"Two weeks."

You could tell he'd been biting his nails and frothing at the mouth and indulging in other heroics while he was trying to get off.

"I've been tied here," he snarled. "Held by discipline. Couldn't take a crate without Stein's OK, and my own wasn't ready. Now I'm shoving off—just as soon as——"

He stopped and held up his hand. The roar of an engine taking off came from the direction of the field. He grabbed my arm in one hand and my heavy grip in the other and bolted out the door.

Somehow I managed to make out a big black plane taking off and heading northwestward. Bill fairly giggled and towed me in a wild sprint toward the hangars.

"That's Stein's mystery ship," he exulted. "We'll follow her."

We jumped my amphib and started, but not on the trail of that black baby. Bill was at the controls and he poked her off to the westward and set her down on a little field that required careful handling to prevent a crack-up.

But I didn't have time to remonstrate. Before she had stopped rolling, with her nose against the greenery at the edge of the field, the ground hands had swung open the door of a single hangar nearby and rolled out one of the craziest things you ever saw take to the air.

"You fellows up at Schenectady have no corner on the inventing business," he laughed, as I stared at the thing. "This is my own little handiwork."

I remembered then how he had offered repeated designs to the government during the big time, getting them all turned back as too radical to be practical. You wouldn't have wondered either, if you had seen that thing his men pushed into view. It looked like one of the wildest dreams of these hooey-sniffers who draw crazy plans for the science sheets of the future. I couldn't describe it in terms, even after a lengthy study of it.

But I got no lengthy study. I was bundled into a luxurious cockpit, my bag was tossed in after me, and we were off.

I WAS so busy saving that bag that I didn't pay any attention to how we got out of that pocket Bill had dropped her into. There were things in that bag that I hoped I wouldn't be forced to use on the trip ahead, but things that I knew would open even Bill's eyes if I was called upon to display them and their magic.

Bill opened her and I lost all worry about following that black bird we had lost. We didn't eat distance; we gulped it, in greedy swoops. I had been congratulating modern science on the increased speed of planes since the war but I wrapped up the laurels in a nice mental bundle and handed them over to Bill as we tore along with the engine hardly audible above the shriek of the wind that passed our glassed-in cabin.

"Tilt pack and dope off," called Bill cheerfully. "There's a tip lever under your chair."

"I'll help you find that black devil," I mumbled, although almost asleep.

Bill laughed and slipped a set of rubber bands over the controls. Then he half turned to me and I groped about for the duals, thinking he meant for me to take her.

But there were no other controls in evidence. He was lashing the wheel with the unconcern of a lone sailor at sea.

If you've ever been in the air you know how I felt. I shouted at him to try no fool stunts, but he only grinned at me.

"Aw, go to sleep," he called, studying the map he had unrolled.

"And wake up to find myself dead. Don't take such crazy chances, even if your girl is missing. I can prop 'em open long enough to handle her for a few minutes so we won't crash."

We struck a pocket and dipped. I reached for the stick but Bill knocked my hand aside and grinned at me.

She righted herself quicker than I could have done it and went right on droning into distance. I stared at Bill and got a grin for answer.

"Little invention of mine which I call a self-leveler," he nodded. "Guaranteed to hold you on your course at the set altitude until gas runs out or the old engine conks off."

I watched the performance for a few minutes and then kicked my chair into a recline. Unless those dials were lying, we were doing nearly four hundred miles an hour without a hand at anything and doing it like nobody's business. Who wouldn't sleep under those circumstances.

It was dark when Bill shook me awake and we had just come to a halt.

"Lost the black devil," said Bill grouchily, but we're off on a hunt for whatever it is Killer Stein tried to keep secret in those swamps of the Xingu. We'll try day flying, in order to look around."

He had put his queer craft down on quiet water and proceeded to tie her to a tree for the night. Then we ate some supper and I went back to sleep again.

It was long after daylight when Bill again shook me out of it. We were in the air and cruising over endless forests.

"Trouble ahead," grinned Bill.

I followed the direction he indicated and picked out that black plane against the trees. It was coming fast and there was something threatening about its aspect.

"How'd they locate us?" I asked, as if he would know.

"Probably have a series of listening posts scattered all through here. It's something big they're hiding. Must be real money behind it. Thought at first there was nothing more than a little slavery and secret rubber work but I'm sure that's out. This thing is big."

He had been fumbling with some gadgets above his head as that black baby came after us and I had opened my grip.

"Looking for your gat?" he asked, smiling at the absurdity of it. "If you are, you're wasting time. These babies are equipped with the latest in machine-guns, unless I'm mistaken."

I merely took out a silver cigarette case and offered him a smoke. He grinned at the coolness I was showing under a resumption of fire and little guessed what that harmless little case meant to me.

"I'll give 'em the sun gun if they get flippy," Bill declared.

He swung down an odd contrivance that consisted of a beveled mirror of large dimensions and an exaggerated reproduction of a reading glass, swung on hinges and so synchronized that the mirror moved as he swung his huge glass in or out.

The plane drew nearer, for Bill had slowed to about one fifty. It banked and one of the occupants patted a machine gun and pointed earthward at a narrow strip of water.

Bill shook his head and kept right on fooling with the glass. The black baby turned and came at us, spouting fire through her blades.

"To show us they mean business," nodded Bill, still tinkering unconcernedly.

I lifted the cigarette case and started to feel for the secret catch but Bill had suddenly leaned forward. The glass was sending a concentrated beam of light at the black plane, as it wheeled. I saw it flicker for one illuminating instant on the gun and then shift off toward the jungle growth below.

That short space of time was enough. The gunner fell backward, his hands covering his eyes, and his gun ceased firing. The other occupant of the ship bent over to give us another spiteful discharge but the gun was jammed. That glass had thrown such an intense heat that the metal had expanded and ruined firing efficiency.

Bill opened her and left them winging down toward the water and relief for the blinded gunner. He dropped low over the water, exulting in his success.

"See how she works," he called. The sun gun ripped that beam along the tranquil river. A streak of steam followed its passing and an alligator in its path started thrashing viciously, as though seriously burned.

I couldn't resist showing my own toy.

"Swing back again and let me see the 'gator," I suggested.

I had touched the spring before we were over him and run out a long tube of telescoping glass. Bill watched, wondering.

The alligator was still churning water. I drew a bead and pressed the hidden trigger.

There was no sound of explosion or of a missile. That 'gator was there one instant, thrashing and churning about in pain. The next instant he had disappeared completely, without roiling the water.

"Hello," said Bill excitedly. "What's that you've got? Where's the 'gator?"

I made no answer, but aimed at a tree. The mighty growth hung far over the water festooned with creepers and moss and waving triumphantly. Then I pressed the trigger and the tree suddenly wilted before our eyes into nothingness.

"Hey, what is that?"

"An element gun," I vouchsafed. "Most modern weapon. Knocks any living thing back into its original elements the instant the ray strikes it. Compact, inexhaustible, and expensive as the deuce. I'd call it an improvement on your sun gun, what?"

Bill had to ask questions then. He admitted his gun depended on the heat of a tropic sun and some means of conveyance, where mine could work under any circumstances and could ride in my vest pocket. When I told him I could level the vast forests about us without exhausting the ray, he looked skeptical but did not ask me to demonstrate.

"Pretty handy thing to have about you when you're adventuring into the unknown," he admitted, "but be careful I'm out of range when you turn the blame thing on. I'm not ready to conk-off just yet."

Then his eyes lighted on something in a tree below us and he circled.

It was a wrecked plane and Bill's face was ghastly under the tan as he studied it.

"Pad biplane," I called, recognizing her by unmistakable signs.

"The bus those two Yanks were flying."

His color came back but not for long. Twenty seconds later, as we were fighting for altitude, he winged at a sudden flash of fire from the engine, followed by silence.

During that first agonizing second of slipping, I wondered what had happened to cause that flash and what was going to happen to us. If we escaped the threat of that crash we would be stranded in trackless jungle hundreds of miles from any habitation but that of our suspected enemies.

YOU can think a lot in a few seconds and I was thinking what fools we had been to bottle ourselves into this crate with no chutes and no chance to get out and use them if we had any.

Death in a thousand forms was waiting for us and I suddenly remembered that the little wife was really a mighty engaging personality and that life had been mighty sweet in that little honeymoon cottage outside of Schenectady.

Bill only threw me a reassuring smile, after that first moment of alarm, and threw over another lever. Something started whirring somewhere above us. I thought our descent slackened.

"Helicopters on both wings," nodded Bill, run by the latest type of dry storage batteries. Incapable of carrying us far, but powered sufficiently to let us down easy."

Our descent actually slackened as he spoke. The floor pressed up against my feet and the old seat seemed to be lifting me. Then we righted and came to rest a few feet above the trees.

Bill studied the terraine and manipulated a bar above his head. The plane started off slowly, just holding her altitude. Soon he had lowered us into a bayou with such a gentle descent that we barely rippled the water.

"Pays to be prepared for emergencies," grinned Bill. "Had an idea that they used some engine crippling device to drop the señorita. Stein wouldn't have countenanced firing on her, even after she'd given him the gate. Crazy about that kid, same as I was. Well, what's to do?"

"Reckon we can repair the damage?"

"Yes, but to what avail? They'd only burn it out again. Reckon they've perfected one of those European dreams of killing combustion motors."

"Some kind of ray?"

"Ray nothing. Honest to goodness old electricity, broadcasted in some way and tuned in by our ignition. Been reading about something of the kind in the science mags. They've got some clever babies in these woods. We're hunting big game, Ed."

"Or the big game's hunting us."

I nodded aloft. Snoring along up there high above the trees was the black crate we had sent earthward earlier in the venture. But she wasn't snoring, when we listened. She was gliding silently along, although her prop was beating the air into a blurr off her nose.

"Thank God we're under this tree," sighed Bill. "They won't see us."

We had idled in the slow current until the overhanging branches of a tree screened us from view. But the black plane circled and studied the country carefully, evidently having placed the site of our mishap by means of those listeners Bill surmised they had everywhere.

"We might be able to get out of here, if we could keep hidden," Bill ventured. "I've extra plugs and wire enough, if we could rig her and get going while the juice is off."

"How's he flying?" I asked, still too doped and plane groggy to think.

"Evidently has a transforming unit for changing that broadcasted juice into power. It's one of the coming inventions. Further proof that they've got some brains tucked away in this swamp somewhere. We're up against clever birds, boy."

The black plane slanted off across the treetops, still searching. Bill and I crawled out to the motor and began investigating.

Whatever had hit us had certainly done some damage. The plugs were fused to the engine and couldn't be budged. The wires had just dripped off. We hadn't a hope of repairing things under existing circumstances. It would have taken days in a machine shop to ream out those threads anew to install fresh plugs and even then the interior of the engine might have been damaged by the heat of that fushion. Pistons might be swelled, warped, or cracked and other parts destroyed.

"Guess we take to the boats," said Bill. "Slow but better'n swimming."

"You've got a boat?"

"Ed, I've got everything. I didn't come in here to make a quick look and then beat it. I came in here to discover what that fiend has done with my girl, to find out what in hell they're planning in here, and to do my best to upset their damned applecart. If a plane won't make it, a canoe might. If not a canoe, then a swamp trek."

"I reckon there'll be plenty of trekking, if you can find out what direction we ought to trek. Those birds will be canny enough to know that travel in this region is *via* air or water. If they're trying to hide something, it won't be near the river."

"That's almost brilliant for you," grinned Bill. "You're likely to be of some use if you keep on thinking up thoughts like that. Suppose we just stay right here until that black buzzard is tired of looking for us. Then we'll let the old helicopters pick us up and mosey us on until we locate the center of hostilities. That ought to give us a course."

"Sounds good to me, Bill," I answered. "We might flounder around for months in these swamps without sighting anything, where we could spot it in a few hours of flight."

"Here's hoping two things—that they don't find us before we can look and that the current isn't exhausted until we do spot the hide-out. I'm guessing it's a sizeable place, from the precautions taken to keep aviators out of the section."

The words were barely out of his mouth before the black plane glided past again. We could almost feel the eyes of the occupants on the river but we had used our machetes to good advantage during the delay, hacking a path into the jungle and drawing our flying boat farther into the greenery.

At Bill's suggestion we now cut deeper, off at an angle, and had scarcely worked the plane into this recess when the black machine struck the water outside and taxied along on the surface.

Luckily our wings had struck some vines in passing and dropped mossy tendrils in such a way that they partly concealed the gap we had cut in the greenery. Although we could see the black plane clearly enough out in the dazzling sunlight of the bayou, her occupants stared in vain into the dark recesses where we crouched.

They went on about their hunt, evidently satisfied that we were not on that particular stretch of water. Bill chuckled at our narrow escape and seemed almost his old self again.

"I reckon there's a little god of luck camping right on our tails," he declared.

"I could give 'em the element gun if they came near."

"And we could grab their crate. Not a bad idea, little bright eyes. Why didn't you pop 'em off as they went past?"

There were two good reasons, but I only gave him one. I'd never felt any too proud about the first one and Bill would never believe it, knowing my record for Huns. I had never quite recovered from the nasty feeling of wrong-doing whenever I took life. Not necessarily human life but any life. It was a hang-over from childhood when I dreaded to see a rooster hop around in headless gyrations after I'd introduced his neck to an axe in preparation for Sunday dinner on the farm.

A machine gun or a plane crash left an awful mess, too, although this new gun of mine was a decided improvement. Still I hated to kill anything unless it was necessary, although Stein came in the same category as that alligator I had blown into ashes a few minutes before. Much as I hated him for all that he had done, so recently illustrated by that wrecked Pad, I couldn't quite work my hate to the killing point yet, although I realized that he had been intent on killing us before our sun gun jammed his machine gun and that we might easily have been precipitated to a sudden death by that sudden cessation of our motor.

"Didn't dare risk it," I said. "I could only spot one man. The little finger or one toe of the other would have been enough, for the slightest touch of the ray to any part of the body will do for the whole. But I didn't dare puff one of them out for fear of scaring the other away."

"You're foolish," snapped Bill. "What would you do if you were taxiing a bayou and your companion disappeared? You'd circle and look for him, wouldn't you? That other bird would have presented a perfect target a few seconds later. You're too damn cautious."

I shrugged to cover my real reason for not destroying the men and hoped it wouldn't be necessary. I had never seen a man subjected to that ray, but I had seen a dog, confined in a small chamber, too. There had been no smoke, just a disappearing dog and a little heap of elements that resembled ash or dust on the floor, with a collar lying on top of the remains.

"What do you think is up in here?" I asked by way of switching the conversation.

"I'm stumped," Bill grunted. "But I'll bet it's something devilish and cunning and mighty threatening to the world at large. Any power that concentrates a number of skilled inventors and scientists in a dismal swamp and then ruthlessly destroys all who venture within the confines of the retreat, isn't there to discover a new perfume nor the habitant of the famed golden-feathered hummingbird of the Amazon."

"That's good guessing," I sniffed. "I'd already proceeded that far in the short time I've been on the job and handicapped with the vacuity you used to insist I carry atop the shoulders. Queer thing you haven't done better in the years you've been snooping around."

Stung by my sarcasm, old Bill opened up a little.

"I've been saying nothing about what I expected to find in here, pinhead, because I didn't want to start you laughing. Up at Schenectady you birds think you've got a corner on inventive genius because the *Times* blurbs about you once in a while and somebody spends good American money to have the radio announce new gew-gadgets. But there are brains concentrated in this swamp. Brains of more than inventive genius. Unless I miss my guess, there's some stunt on foot for the subjugation of the human race to a small band of overlords, these masters of science and invention who are working out their diabolical schemes in that morass where man has never beaten a pathway."

I did laugh at that. Who wouldn't, knowing Bill. He hadn't lost his enthusiasm about making the world safe for democracy, even after that stretch in France and these years in the tropics. Lots of idealism in the old bird, after all. Idealism and imagination and the kind of terrors the two engender when they run into something they don't quite understand.

"Worse than ever, Bill," I taunted him. "Let's see what was that spying stunter of ours named?"

Bill threw the wrench he'd tested the plugs with at that one. I ducked and let it plop into the swamp, still laughing. That spy scare Bill had developed was still the laughing stock of the boys who had survived those years in the French clouds. You couldn't blame him for getting a little riled at my bringing that up now, especially when he was dead serious about this imaginary threat he thought the world faced.

"So they go to kidnapping pretty girls for their schemes, eh?" I grunted, before Bill could lay his hands on anything else. "What's her part in the dirty work? Is she to vamp all who oppose this scientific conquest of suffering humanity?"

"Leave the kid out of it," snaps Bill. "Stein's human, even if his cold-blooded associates aren't. He's nutty over the girl and swore I'd never have her. He egged her into flying in here, so that he could grab her.

"But don't jump at my guess if you don't want to. I'm not sure I'm right and I told you it would be a laugh for an ignorant nut like you. Up there at Schenectady you must have seen what a cold-blooded lot of fish some of these dream-brained old fools can become, if they tinker long enough with test tubes and retorts and the rest. Didn't you have a lot of balmy ones there?"

"Some pure nuts," I admitted.

"Well, I'm guessing that somebody has collected the nuttiest the world had to offer and segregated them up here in Para for the sole purpose of creating a superpower. Probably they've been scared by yarns of the spreading Communism until they're saving the world for the only original aristocracy—the aristocracy of brains."

I scratched my head, trying to think up a fast answer.

"You know something about these fool ideas on government," he went on. "Each new scheme is supposed to be the last word—until some group learns how to get control. Underdogs always have and always will exist, but these brainy boys didn't care to be the underdogs, when they had the thing presented to them in the light of cold reasoning."

I NODDED. It hadn't been so many years before that I had heard a college professor with a string of letters rivaling the Chinese alphabet trailing his name who had suggested the breeding of two classes of humanity for the future—an intellectual class to enjoy things and a labor class to carry out the dictates of the genteel. Not half bad if you happened to be of the gentility, but tough on the other poor birds.

"Guessing won't get us anywhere," I growled. "Let's go take a look."

We backed the boat out into the lagoon and lifted her to the tree tops. Barely skimming them for a mile or more, we finally ventured higher. The helicopters were noiseless and our motion was like the slow drifting of a big bird, with a mere drone replacing the customary engine noise.

Perhaps it was our delay in rising that kept us from the observation of the men in the black plane. Undoubtedly, it was the almost noiselessness of our motors that kept us from being caught by the listening devices. For half an hour we climbed steadily, surveying the ever-increasing territory beneath.

Luckily, the almost perpetual mists that cloud this jungle region had lifted. Far ahead of us we made out the roofs and turrets of an odd city of steel and glass, plainly a modern creation in this backward wilderness.

Then our motors began to slow perceptibly and we began to drop.

Bill turned to me questioningly, after getting a compass bearing on that distant group of buildings. There was triumph in that glance and I couldn't blame him. The sight of those weird buildings there in that swamp morass had filled me with strange ominous forebodings also.

We were not so lucky coming down this time. The motors were so spent that we were forced to land where they dropped us. There being no available stretch of water, we tumbled down toward the trees.

Bill had saved one battery for the last minute, but even that could not save us. The motors revived and lifted us for a few seconds, but not long enough to carry us to water. Every stream in the vicinity seemed arched over with green and there was no open bit as big as the palm of my hand to welcome us.

"I'm picking a creek for the crash," called Bill. "Get ready for it."

There wasn't any getting ready possible. We were just faltering down toward one of the long dents that ran like cracks across the terrain, recognizable to any jungle flier as tiny rivers completely shrouded by arching trees and clinging vines. The one that we were about to strike wound crookedly off toward that distant city.

We touched with wheels and pontoons. There was a scraping and tearing. Then a wing ripped loose with a jerk and went spinning off into the sky, supported and dragged on high by that helicopter that had been unable to carry the weight of the ship, yet made light going of the single wing.

The entire weight of the craft being thrown upon that other helicopter, we swerved and dropped. Only the proximity of the trees saved us from coming hurtling down with a mighty jolt. The branches ripped the fabric away from our fuselage, tore our other wing, smashed the prop and the helicopter on the other wing into splinters.

All of this happened within a few seconds, but we were able to discern it all in rapid motion before our eyes. Like two men observing the setting for their own destruction, we gripped whatever was available and waited for the worst to happen.

We waited an eon or two, then became aware that we had come to rest. So slow had been our descent and so gentle the manner in which the trees cushioned our fall, we were not aware that we were actually halted until we had stared stupidly for some seconds at limbs and vines that seemed arrested outside our window or falling with us.

"Here we are," grinned Bill.

"Yes, and still where are we."

"The highest I've ever been at the completion of a crash," said Bill soberly, after looking over the side. "It's thirty feet to the ground."

"To what?" I asked, staring down into the semi-gloom of the jungle.

"To water, I guess," Bill amended. "Let's drop down and see."

It developed that an actual drop faced us if we meant to leave our plane. There was no branch within leaping distance capable of holding our weight and no vine to offer us support.

"There's one thing you neglected, old efficiency," I grinned. "You didn't bring along any cloud ladders."

"Say, this looks mighty serious," said Bill. "I'm averse to jumping, perhaps to be forever buried in soft muck and mud. How'll we get out of here?"

I slid open a window and dropped a coin. It plunked into water.

"Damp to say the least," I muttered.

"Say," Bill suggested, "this tree's alive, isn't it?"

I nodded, for the greenery was fresh about us.

"Why not give it your fancy gun and see what happens?"

"You game?"

"Let her go."

I brought out my cigarette case. No need for the glass tube now, for the ray could not miss such a target so close at hand. I stuck the thing out of the window, aiming earthward, and pulled the trigger.

Instantly our descent resumed. The tree that held us whisked into nothingness, we rolled and shot down into the darkness that was suddenly illuminated as sunlight streamed through the hole I had made in the jungle.

There was a momentary glimpse of murky water and muddy bottom and then we struck. I sensed the impact and then must have struck my head against something, for consciousness fled.

It was dark when I awoke, not with the mere gloom of the jungle in day but the complete darkness of an Amazon night when the very light of the stars is concealed by the miasmic steam out of the living and dead plant life that sprawls everywhere.

For agonized seconds I thought that I was in my old crate somewhere in that hell of European battlefields and then the realization of my equally serious plight came over me. I groped about wildly for Bill, wondering if he had survived.

My hand touched his head. I followed the round of his forehead to his eyes, scarcely daring to touch them for fear of finding them open in death. Then I nerved myself to the task. The lashes were upon his cheeks. The eyes were closed.

But that forehead was clammy cold in the steaming heat. I fished for a flashlight and turned the beam upon him. He had fallen from his seat as the crate fell and we lay against the controls. The release of one had cut Bill's cheek and blood was over everything.

Luckily the glass in the windows was of the non-breakable variety and the hordes of insects that swarmed outside had been unable to get at him and the blood. But he was in a sad enough condition from loss of strength and I foresaw trouble ahead in attempting to get through the jungle with my wounded companion, even if we had been free from the menace of Killer Stein and his men.

Ice water from a thermos bottle revived him and the wound proved to be slight. The blood had been mixed with perspiration to give an appearance of greater than actual loss and it did not seem absurd to think that Bill was right in his contention that he would be able to trek or paddle by daylight.

The long hours of night passed slowly but dawn came at last and we were able to survey our condition. We were slightly better off than when perched in the top of the tree, for the bus had slipped and fallen sideways, so that our door was jammed, as well as the door of the luggage compartment.

My own head was swollen from a blow I had received and we looked like two forlorn wanderers as we set about the task of getting free and salvaging such of the equipment as we might need.

Bill attacked the cracked glass with a bar he wrenched free from the floor, while I began rummaging in my precious bag of tricks to make sure that nothing was broken. While I was doing this, Bill made a hole and crawled forth. I heard him cursing a few seconds later, after his efforts had been transformed to the baggage.

"What's the matter, old man?" I asked.

"Matter enough. Our drinking water's lost. The reserve thermos bottles were busted by the fall and it's loose in the fuselage."

I laughed and Bill thrust his perspiring face in at me.

"Laughing because I'm worried over drinking water, eh, smarty? Suppose you think we can drink this muck around us. Say, we'd be dead in a few hours if we did. The jungle's rotten with fever and a million other ills."

"I'm no fool, Bill," I replied, "but I couldn't help laughing at your worry. Take a squint at this."

It was a compact little toy I passed him and Bill studied it in vain for a few minutes. I could see his brow wrinkling as he felt that he would be forced to admit the thing stumped him.

"It's a distillery, pocket edition," I told him. "Works with the rays of the sun for heat and produces about a pint of liquid in less than half an hour in the tropics."

That was only a beginning, but Bill never asked about the other trinkets. He was busy setting the thing in operation, just to have the laugh on me if it wouldn't work.

IT did, and so did we. Robinson Crusoe had a cinch of it compared to us. He could work in the sea, with the breeze to cool him, but we were shut down in that steaming jungle where a man would die of exertion in a few hours by merely sitting still and thinking about the heat.

It was impossible to pry the crate over, as there was nothing against which to get a leverage. We could only batter our way through the sides to remove what was left of our belongings.

Thankful for the light construction, we soon recovered everything that had not smashed in the fall. Bill's early investigations were verified as we reached the thermos bottles and found them shattered and the water lost. But he had not stinted on provisions. There was food enough to last for weeks, packed in the most approved manner for jungle travel. With that little distillery to give us pure water, we could survive for a long time, unless predatory animals, snakes, natives, or the men under Stein accounted for us.

But we faced another worry immediately. We could not hope to flounder through the swampy jungle with any great burden upon our shoulders. The stream was so low as to be barely navigable, even in the shallow draft boat Bill had tucked in among the other stores. Besides, that boat was only inflated rubberized canvas and any jagged root might rip a ruinous hole in it.

We debated our next move at some length. Bill was all for speed, as he was burning up to get to that city of mysteries, but I saw that haste now might end in ultimate disaster. I vetoed the toy boat before he had blown it up, declaring that it was not only unsafe but incapable of carrying any part of the equipment we needed.

"Well, what do you suggest? Going to put on rubber boots and wade? How can you lug even nearly as much on your back as we can carry in the boat?"

"I wasn't thinking of wading."

"Then what?"

"Rig a raft, using the pontoons."

Bill fussed and stewed, but it was the obvious thing to do and we finally settled on doing it. Although the long floats were of thin construction, they would stand infinitely more contact with stumps and roots than we could expect the rubberized canvas to bear. Then, if the pontoons failed us, we could still resort to our boat.

But we were almost as unwise as old Robinson Crusoe at that. He built a boat too big to launch, but we had no trouble there. By merely slashing away the crumpled wing that remained and unscrewing a few nuts and bolts, we were able to slide our pontoons out from the mud and ooze. One was broken beyond repair, but a little ingenuity sufficed to rig a balancing raft across the sound one. Then, when we were ready to start, we suddenly realized our difficulty.

The river was solidly barren by green things that grew up from the sluggish depths or hung down from the heavy canopy. We could not progress a foot without hacking our way with machetes.

"It's probably twenty miles to that town," snarled Bill, after twenty minutes of slashing and inching forward, "and we've been twenty minutes going twenty feet. If my girl's still alive, she'll die of old age before we get there, even if they haven't sprung their big stunt long before."

I grinned and reached for my vest pocket. I had just about decided that my little cigarette case would be useful.

Bill stared as I carefully cleared away the creepers by the simple expedient of turning them back into their elements. An occasional tree fell victim to the ray, although I did my best to avoid touching even the tip of a branch, lest the gaps in the jungle attract the attention of the men who were looking for us and lead them to our trail.

A long vine would hang across our way, heavy with moss and repulsive with the stench of rotting vegetation. My gun would find it and tear a long gap far aloft in the foliage, where the other extremities of the vine extended.

Once a big snake was suddenly dropped into the stream as his support was rudely whipped into dust beneath him. He started toward us and Bill fired at close range.

Instantly the stream was a whipping roil of muddy water and flashing coils. At the first contact of that muscular giant with the pontoon, our venture was ruined.

Unhesitatingly I turned the gun into the depths. There was a sudden cessation of the turmoil. The raft rocked and grew still. The ripples died away.

"That thing is sweet," said Bill admiringly. "I'll take off my hat to the baby who discovered the secret of its power."

"You would never understand the way it works, even if I told you," I patronized, "and so I'll not tell you. Sure, there's one other good reason why I won't.

"I listened to a four-hour lecture on the idea and don't know a damn thing about it myself. All I gather is that it works."

"That's plenty, but it's more than this compass is doing. Look at that needle. I'll swear it's swinging."

It had us both puzzled for a spell. We had swung in a definite arc since leaving the wreckage of the plane behind us, but the needle still pointed off at the original angle. Then Bill nodded.

"I've got it. It's those birds ahead. They've found some way of throwing off the compass of anybody who draws near, to insure freedom from molestation, if anybody gets past the other hazards. We're sure hunting a bunch of wise ones."

We were to learn later that this was exactly what affected our guide, but now we were temporarily upset. The stream had appeared to run from the direction of the buildings we sought, but there was no way of knowing that down here under the trees. The banks were low and inundated, so that we might slip off into branches or bayous at any instant, losing precious time and perhaps losing ourselves. Within five minutes from the discovery of compass error, we ran into a barrier that threatened to end our trip.

A mighty tree had fallen across the stream some years before and had accumulated a mass of flotsam that created an excellent dam. Although we could make a short portage across the top without much difficulty, we would still be at a decided loss as to where the original stream led through that flooded region, since the growth was equally heavy in the bed and along the flooded banks.

From the air we could have traced that jagged crack in the treetops that indicated the original course of the stream, but we could not see to the tops of the trees through the maze of greenery, and any attempt to destroy the vines above us by means of my element gun would necessarily remove the trees as well, leading the enemy to us.

It looked as if we were stumped, but Bill finally came to the rescue. Leaping to the top of the trunk, he started swinging an axe with lusty strokes.

The pithy wood yielded and he laughed as he labored. Soon a sizable stream was ripping through a hole in the dam.

We waited until the water subsided somewhat and then started forward. Slow work this, with repeated soundings and a constant study of foliage on each side and straight ahead. Then Bill made a discovery.

In the bed of the stream a species of gnarled root was very thick. Evidently it was an old growth that required many years to attain considerable size, for it was not in evidence anywhere along the banks. By looking constantly for these big roots, we were able to guide ourselves up the main body of the stream, unless we were led astray along a branch.

That happened, too, more than once, but we were able, by the position of the sun and stars, to judge our direction. The stars had come out while we toiled and they were to fade under the sun's influence and gleam brightly with yet another night before we reached the end of that waterway and faced a swamp that threatened to defeat us.

Weary with our exertions, fagged by lack of sufficient sleep, the inroads of insects, and the enervating nature of the climate, we were almost ready to quit in despair. Snapping and snarling at each other like a pair of hungry dogs with unhappy dispositions, we crouched on our raft and glowered.

"We're licked," I moaned.

"So's your grandmother," snapped Bill. "You're lookin' for an excuse to run home to that cuddly little wife of yours. I might have known better than take along a bird with an apron string tied to his neck. This kind of job requires a real man."

"Then you should have let me come alone," I growled. "But you're always rushing off and saving something or somebody, from poor old democracy to damsels in distress. Probably that Spig woman is happy raisin' kids for Stein, if the truth were known."

You can't kid some babies and get away with it. Bill was just about tuckered out with the drag we'd had, but he came at me like a mad bull and we were down in the mud and muck, choking and clawing and mouthing insults until we were as slippery as eels with the ooze and slime and neither of us could see to find the other.

We panted and cooled off for a while and then growled what were meant for apologies in the following manner.

"She's the berries, see," from Bill.

"And my wife's probably looking around for a good man," I lied.

"Well, whether she is or not, you keep your eyes to yourself when we meet up with my girl. I remember the way you rolled 'em at the French babies and the only reason I hesitated about sending for you was fear that you'd try the same on Zaida. If we ever get to her, you just remember she's mine."

It didn't look as if we'd ever make that city, if that was where she was. The mud was too thin to bear us, but too thick to give passage for our raft and it seemed bottomless. We finally did our duffle into packs and started hopping roots, guided by the sun and bearings we took on our trail.

We would scramble along over a mass of exposed roots for a stretch, then drop a tree to serve as a bridge over an impassable quag. Sometimes it took hours to advance a hundred yards, but it was the only thing we could do. Meanwhile it was impossible to retain much sense of direction, as we were forced to wind along as best we might on the roots.

WE were hopelessly lost within a few hours, but neither of us admitted it. We might go on squirming and slashing and leaping until we dropped, but neither one would state the awful truth.

Things looked mighty serious for us. Worn ragged already by killing exertion in the heat, pestered to death by stinging insects, weighted down with equipment and provisions that we dared not leave behind, we were mighty pathetic beings as we crouched on a tangle of roots and sought to sleep.

I awoke with the sensation of being watched. I rolled tired eyes at Bill, but he was snoring soundly, undisturbed by the glint of sunlight that had found my face and brought me to consciousness.

Quickly I looked around at the other roots, but there was no sign of life. I shook off the sensation and filled the distillery with another dipper of water. The thing worked wonderfully, but we kept it going steadily during the hours of rest, as we consumed unbelievable quantities of water.

Still that sensation of being watched clung to me. I stared into the treetops, wondering if a troup of monkeys might be studying our antics.

I almost dropped the distillery into the water of the pool, for there, on a swaying bridge of vines, was a scowling Indian.

He made no hostile move, although his blowgun was slung over his back and I did not doubt that he was armed with the poisonous barbs so deadly in their execution. He merely stood there watching us, although his expression was far from friendly.

Bill sat up in response to my exclamation of surprise and he, too, saw the native. Instantly he sprang to his feet and began jabbering and waving his hands.

The little Indian scowled all the more and answered in an angry guttural. Bill expostulated and cajoled and seemed to be attempting bribery.

"The damn little cuss won't listen to reason," moaned Bill. "He says we're evil spirits and that his tribe wants nothing to do with us."

"Ask him about that city up ahead. See if he knows anything about it."

Bill resumed his grunting exercises and the little man seemed even more angry. Then he had his blowpipe off his back and to his lips. Before he could puff his cheeks for the discharge of a dart, Bill dipped for his gun. The automatic jammed, evidently clogged with moisture, and the imp on the swaying vine bridge distended his face.

At that instant the element gun found him. The blowpipe and the pouch on his gee-string tumbled to the mud below and there was nobody on the bridge.

I was weak and sick as Bill turned exultantly. It was the first human life I had taken since those mad days of war and I felt tempted to turn the devilish weapon upon myself.

But Bill rallied me and we managed to make a rope of vines and to throw it over that suspension bridge. Then we drew ourselves and our baggage up to its swaying safety and started along it to we knew not what.

"I reckon this is one of the spies for Stein's city," opined Bill. "We'll just trail in on 'em and surprise 'em."

He chose the direction and we slipped along cautiously. It was no easy task keeping your footing on the insecure structure and, loaded as we were, we dared not travel close together for fear of overloading the frail supports. The bridge danced and swayed and buckled and leaped under us. We strode forward as rapidly as possible, alert and ready for danger, since we did not know at what instant we might come upon trouble.

Bill's loud curses speeded my step. I burst past the last bit of foliage that separated us and stared down at him. The bridge ended abruptly at a tiny platform, equipped with some delicate instrument that neither of us quite understood.

"Some outpost," nodded Bill. "Evidently a listening device of some kind. Sh-h-h!"

The exclamation came with a guttural murmur from the machine. Although I could not recognize what was being said, I knew that this was some species of wireless telephone and that somebody was making an announcement in the native tongue.

"Corporal of the guard's checking off his men," whispered Bill. "Hush!"

"They've found the remains of our boat," he shrugged, after another tense period of listening. "Everybody's warned to be on the lookout for us and a band of natives has been sent to exterminate us. Orders are out to kill on sight."

"Nice people."

"But we've still got the hop on 'em. They located the wreckage from the air, but they'll never dream we're already on their bridgework. Probably they think we were killed in the smash or hopelessly marooned. We might pull a little surprise on the rest of the guards, if they're weakened by sending out a party to investigate."

Creeping up for a surprise attack on that swaying bridge would be about as easy as putting out matches by pouring gunpowder on 'em. The whole forest shook in advance when you moved along the vines, but that didn't bother old Bill. All I could do was trail along and hope for the best.

We got it, too, at that. The bridge led to solid ground. A narrow trail opened before us. We were on dry land once more and able to travel shoulder to shoulder.

It gave me a comforting feeling to have Bill so near and I knew that he registered the same, although he did not speak. Facing innumerable threats and dangers, with the forest full of hostile Indians ready to loose their darts at us on sight, it was good to know that you were not alone.

There was no doubting our approach to some sort of settlement, if nothing more than a native village. More paths joined our own and the way broadened. Soon we were walking side by side with plenty of room to go into action if we came upon the enemy.

Each of us gripped an automatic and Bill's jaw was thrust forward with a determination that spelled trouble for anything that interfered with our progress. I have no doubt I looked equally sweet, caked with mud and beard, and covered with insect bites, but we cared little about our appearance now.

The path turned and led to a gate in a high stockade. We peered at the forbidding barrier from behind the dense foliage, unwilling to expose ourselves to any possible guard at the gate.

We had not waited long when there were footsteps behind us. We wheeled, realizing that we were trapped between the fence and this newcomer.

"Oh," exclaimed a fretting whine, "so you are sent to guard my every step? Baron Stein trusts me nowhere alone. Ha, ha, ha. He fears that I will escape from his irksome city of new ideas. He dreads to lose my mind to the enemy."

Bill winked at me and pocketed the gun.

"Don't worry, old sock," he said genially, taking the bent old man who had come up behind us by the elbow. "We're not a bad pair."

"White men for guards," went on the whine, as the thick eyebrows lifted. "Stein must think I'm something worth keeping, to put whites on my trail. Low order of mentality, I perceive, but still whites."

Bill swallowed that one somehow and stood up for more. Playing around with this master mind was going to be no catching of compliments.

"Why don't you filthy creatures ever take a bath? Don't you realize the danger of serious infection and disease that might result from that crust in this climate?"

Bill favored me with another wink and quickly answered.

"We've heard about that, too, but we've no place to wash."

"No place to wash? No showerbath? No tub? What's Stein thinking of? But, then, he wouldn't expect you to be any different than the natives. He can't differentiate between the various orders of lower mentality at all. Come. I'll arrange it."

We hesitated, as he strode toward the gate, but he paused and beckoned us imperiously. We stared at each other, then left our retreat to hurry after him. It would be no use trying to hide after discovery by him, since he would broadcast news of our presence. We might as well face the music.

BY instinct we thrust our guns out of sight, but did not take our hands from them. There was no sense in openly flaunting our distrust, but it was well to be ready for the worst. If they opened fire at the gate, we could at least die game.

The professor, for we knew him to be one by his utter indifference to our sensibilities, knocked at the gate and demanded admission. A native guard glowered disapproval at us, but the professor snapped.

"Another experiment of mine. Improving things. Constantly improving them. City would slip back into the swamp and jungle again if I didn't watch constantly."

The guard muttered something under his breath, but allowed us to pass. I knew from the glance he cast after us that we were in for it, as soon as anybody in authority could be sent on our trail.

But the sights that met our eyes drove even thoughts of danger into the back of our minds. Here were such wild structures as only the Jules Verne type can dream about; observatories, stand-pipes, twisting contortions, up-ended conduits, glassed areas, latticed work, pipes, chimneys, engines beyond description.

Then the very temperature struck us with a decided jolt. Inside that stockade a gentle wind cooled us. We actually shivered under its touch.

"The best work is done in the temperate zones," nodded our guide, at this sudden dropping of our jaws. "I judge that Stein has kept you out in the natural heat of the jungle. He would be careless of workers. This atmosphere is dried and cooled in order to stimulate the brains of those who toil within. If we cannot find a spot for our laboratories in the temperate zone, we need only create a similar temperature here. The experiment is my own and highly successful."

He took us to his own quarters and waved us to a shower bath. Cool water tumbled over us in showers. We peeled off our muddy garments and rinsed the mud from them, but the professor brought us clothing.

"Your garb is fit only to throw away," he said. "Put on these things."

We dressed and rescued from our packs such things as we felt might be needed. The rest we tossed with our clothing into a big receptacle the professor indicated. A few seconds later the big can was picked up by a traveling magnet and whisked away along a power line.

"Automatic," nodded the smiling professor at our wonder. "Conveys rubbish to the incinerator the instant it is deposited in the can. Prevents the accumulation of filth and the attendant breeding of germs or insects. We guard in every way against disease."

Behind the thick spectacles the eyes gleamed with an unholy triumph. I could see that the man was a fanatic and the casual manner in which he spoke of the lower order of human life had given me some inkling of why he was a party to Stein's great scheme. Fret he might about being spied upon, but he was at heart allied against the common run of humanity, in spite of his humane treatment of us.

"You are not Communists?" he asked naively.

"Certainly not," declared Bill.

"Think Stein would have selected us for guard duty if we had been?" I asked.

The little old man was highly pleased at our answers and hopped about in glee, poking us with an appreciative forefinger, as though delighted to find us endowed with so much intelligence.

"Quite right," he declared over and over again. "Quite right. Shocking thing. Shocking thing. Elevation of the ignorant. Depression of brains. Intellect nothing. Brawn everything. Ambitionless. Stagnant. Science, invention, research, all drowned in the curse of mediocrity."

Bill nodded appreciatively. I grinned agreement.

"Here all is different. Brain triumphs. Intellect is crowned. Genius for improvement rules."

His voice lowered. His little eyes narrowed.

"Soon we will be ready. Soon we war against Communism. Might shall meet might. Physical force and brute strength shall encounter skilled cunning. The millions must bow to the gifted scores. We shall establish a world for the development of superior minds. No longer shall inferior things with a flare for organizing and arousing the ignorant be able to command."

Bill and I exchanged glances. He winked at me broadly and I nodded ever so slightly in admission. The old boy hadn't been far off on his guess.

"Do not fear," chuckled the old fellow. "There will be no fighting, even for the guards. This will be a conquest of brain over muscle. We are perfecting every day in these laboratories the means of destruction for the hordes that cannot be won over. The world threat of Communism is over. For the first time in history we shall see the establishment of a government founded purely on ability to rule and not upon sheer power of accident."

IT all sounds idiotic to look back upon, but it did not sound so absurd coming from those thin lips, backed by the intense gleam of those eyes. Stein had sold his idea and sold it thoroughly to these men who did his bidding. He had promised to use their talents to create a single unified nation on earth, with all thoughts of boundaries and differences swept away. The practical means of creating this super-state he had not left to chance, either, as we were to discover later, but the ruthlessness of the destruction he planned was known to but a few. Men with such a humanitarian outlook as this little fellow possessed were kept in ignorance of the slaughter necessary to achieve his ends.

Likewise the little professor and his fellows were in ignorance of the fact that Baron Stein was slated, in his own arrangement of things, to rule this world of intellectuals he sought to establish. There was to be no sifting methods for obtaining the best and clearest minds for the job, as he had suggested in his premises. He was to be the ruler, undeniable and indisputable.

But those things we learned later, although we already surmised them, knowing the Killer and his ways. For the present we were absorbed in getting some idea of the size and nature of the experiments being carried on here and the method planned for launching the attack on the world.

Our informant seemed uninformed or unwilling to divulge the secrets and we dared not press him. Already he was beginning to look upon us suspiciously as far from the ignorant creatures he had thought us at first. He even openly hinted that Stein had been in error in assigning us guard work when we showed indications of having enough intelligence to do some of the experimental work within the compound.

Bill was trying to form some sort of explanation when we heard the sounds of approaching footsteps. Peeping through a window we saw Stein striding along on the heels of the guard who had let us through the gate.

"Quick," whispered Bill, "hide us. Show us a way out. Here's Stein."

The professor hesitated, looked startled, then opened another door. We dashed out, just as Stein called petulantly at the door. "Open up, Craswick. I want to talk with the two men you brought through the gate."

Talking wasn't all he wanted to do, for he had an automatic in his hand, but Bill and I were not being interviewed by anybody just then. We were high-tailing for dear life down a long corridor of sheet iron and the distance we were putting behind us was strangely comforting, in spite of the fact that we, too, were armed and ready for trouble.

We discovered that the corridor ended in a blind wall. The professor had tricked us. Stein had but to open that door and follow a few steps to the turn in the passageway to have us trapped like rats.

Bill asked for a leg up and I gave him my cupped hands and a mighty boost. Bill was no lightweight, even then, but I shot him high with the fever of anxiety. It was a concrete wall, with iron spikes in the top, and his big hands found two of the irons and held on with the grip of death.

"Swarm up me," he whispered.

I swarmed, with the agility of a frightened monkey, and tumbled over the other side into a similar passageway walled with solid concrete on both sides. Bill was beside me in a jiffy and we were flitting down the straight stretch.

At the end there was a door and I opened it to burst through. Bill was close on my heels and heard the gasp of astonishment that burst from my lips.

"Hello," said a sweet voice. "I knew you'd come, Bill-ie. And this is your friend, yes-s."

You might know how they say it, but you could never quite get the soft purr to it that this little queen managed. Incidentally you'd be handicapped if you tried, for she had the looks to make anything sound liquid and enticing. Nothing short of the little lady anxiously awaiting the doubtful return of yours truly in distant Schenectady had ever looked so good to Eddie.

You'd have thought we had just dropped in for tea, or whatever it is the Spanish serve, for she's plainly Spanish and the height of all right. Under this pretended lack of surprise is a joy that shines in her eyes and I didn't blame Bill for facing all we had been through ten thousand times over to start that light shining.

"Señor Stein will be charmed, I am sure, Bill-ee."

"Señor Stein's already charmed and coming. Where'll we hide? This is my war-time buddy, Ed Holden."

"And not holdin' out on anybody," I started to wisecrack, but Bill threw me a look that told he wouldn't stand anything, even from a married man. Some ginks are just that jealous when they do finally fall. Share his last dollar with me and bust his neck to help at anything, but not a smile am I to rate from the little woman, once he has staked his claim.

But the señorita thinks differently and hands me a dazzler as she waves us out of her little garden and into a maze of growing things.

"The experimental gardens," she nods. "Plenty of room to hide here, no."

We ducked into the paths and rolled under some lush verdure. Then we heard Stein's voice in her garden.

"Your eyes are bright today, señorita," he said.

"At your coming, commissioner."

Stein laughed harshly.

"They don't usually lighten at my presence."

"Even such a heart as mine might change, señor."

"But there was no need of change. One of those two who came over the wall was your Señor Bill Ames, yes?"

The mockery of tone and questioning ending made Bill stir uneasily at my side, but he held himself in check somehow.

"Two who came over the wall," she repeated emptily. "Oh, but this is some kind of a joke. What of my Bill-ie Ames and the two things that came over a wall? Is it a riddle, as you say?"

"It's no riddle, young lady, not even to me. It's plain as the nose on my face."

"Very plain, I see," laughed the girl and Bill poked me in the ribs, for Stein had a prominent proboscis. He could have disguised himself as a native tapir by undressing, rubbing a little mud on his skin, and running about on all fours.

"You will make jokes of a different nature, when we capture that same lover of yours. You are full of these moving pictures romances where the hero comes in time to save the beautiful girl from the man who is about to force her hand in marriage, but this time there will be a happy ending—for the villain. My guards are even now combing the city. They cannot escape my net."

"Still you talk in riddles, señor. Can you not explain to me."

We could hear Stein pacing on the concrete walk and both of us knew just how he looked as he stalked up and down before her, eyeing her suspiciously. She must be a clever little actress to fool him long.

"Two men were brought into the city by that fool Craswick. I suspect they are Captain Ames and a confederate who have come on some silly idea of rescuing you."

"How gallant, yet how foolish of them. What can two mere men do against you and your mighty machines?"

"That little speech convinces me, lady. They came this way. You couldn't have answered in such a studied manner, if you were ignorant of Bill Ames' proximity. You're a good actress but your lines sound just as artificial as those of any actress. Bring in the guards. They're in the experimental gardens."

Bill pressed my arm just above the elbow. We exchanged glances.

"No use to make a break for it and no use to try to hide," said Bill in a mutter. "What do you say, do we shoot it out?"

"The girl might get hit."

"That's why I asked instead of firing first. Glad you're seeing it my way. We'll surrender before they start working on us." He lifted his voice and called, "Hello, Stein, we're here. We're coming out with our hands empty."

We did just that, although I felt like kicking Stein into eternity with my element gun and taking a chance on being able to talk a little sense into the rest of the leaders. But I kept the cigarette case in my pocket and followed Bill.

We knew from the light in Stein's eyes that we were fortunate in being discovered in the girl's presence. Those were killer eyes again, hard and sharp with the lust for human blood, and he restrained himself with an evident effort from emptying his automatic into us.

"Trying to gumshoe my dynasty, eh?" he laughed. "Didn't realize how complete my defenses. Even after you had passed the outer barriers, you were never out of danger."

Bill said nothing and I echoed him. We watched that gat carefully, aware that he would shoot on the first hint of excuse. Nothing but the hope of gaining the respect of the girl kept him from drilling us where we stood.

If he had doubted her love for Bill, he read plenty of proof of it now in her face. She was white as we came into her private garden to face the native guards that rushed in at Stein's call and her eyes plainly revealed her terror at this turn of affairs.

"It looks as if the game was breaking for me," smiled Stein. "This man was the only fly in my ointment. The rest of the world is ignorant of my intent."

"*Was* ignorant you mean," said Bill.

The Killer went black with rage and his gun lifted again. His narrowed eyes bored into Bill's bland ones, as if to pry out the secrets from his brain.

"You but bluff," Stein shrugged. "The world sits complacently before us, stupidly ignorant of what we plan. We will burst upon it with our perfected plans and capture every stronghold within a few days. Nothing can stop us."

"Sounds like that *Me und Gott* talk of the old days," I suggested.

The Killer favored me with a long look of intense hatred and then shrugged again.

"Why," he asked himself aloud, "should I allow myself to become aroused over the words of two men who but hover on the very brink of eternity? It is unwise in one destined to command the world."

"We've done a lot of hovering," Bill reminded him, "and you've failed a number of times to tip me over the edge."

"But this time, you are hopelessly in my hands. Nothing can save you."

"Nothing?" asked Zaida pleadingly.

Stein turned with a bow.

"Ever attendant upon the wishes of the charming ladies," he sighed, "and this lady in particular. Yes, if you will it, he shall go free."

"If I will it?"

"Exactly. If you but will it sufficiently to invite him to act as the best man, as they say it, at our wedding."

"Never," bellowed Bill. "Don't accept his terms, Zaida. He wouldn't keep his agreement."

THE guards had crept about us, their bare feet noiseless on the concrete. At a nod from their master, they began feeling for arms.

The cigarette case was piled with everything else that came from our pockets. Stein merely glanced at it and then turned to us.

"We have quarters provided for such rare visitors as we entertain. You will follow me, please."

Zaida cast a despairing glance after us, but we could not resist the scowling command of those Indian eyes that bade us go. We wound through numerous passages, past the weird machines and inexplicable devices to the underground dungeons that had been built for such wanderers as were unfortunate enough to penetrate the outer defences.

There was medieval grimness in that chamber to which we were led. Nothing was lacking in that torture hall, not even the emaciated body of a single survivor of the grim things done here below the light of day or pity. The wretch clanked the chains that bound him to the damp wall at our entrance, staring at us from sunken eyes.

"Hello," said Bill, "it's Trelaine, isn't it?"

The wretch merely muttered and crawled as far from us as his limited bonds would permit. Stein laughed coarsely.

"Yes, it's Trelaine, the first fool to try to discover the secret of 50°-55′. I thought he was backed by European money, but I couldn't tease it out of him, if it was the truth. We tried all right.'

The poor creature moaned and buried his head as though to avoid further punishment. His back was a welter of scars, mute evidence of the teasing Stein mentioned so casually.

"You wonder that I could do it," he laughed. "You're a couple of weak fools. It takes strength to rule, strength and an iron hand. There is too much of this twaddle about human kindness abroad in the world. Kindness and justice and humanity are the bunk. There's none of them in nature The strong eats the weak. The puny of body or of wit dies to serve the strong. Thus only can a super-state survive."

He waved us to the chains. They fettered us to the walls and fastened great iron balls to our feet. In the cellars of this modern city we were imprisoned like the victims of ancient feuds. Progress and retrogression lived hand in hand in this weird world this crazed mind had created.

We did not doubt the insanity of our chief captor during the days that followed. He came and lolled in a great easy chair to watch his fiends work upon us. The tortures of the old world were added to the limited ones known to the Indians of the new and we were fast on the way to becoming replicas of the cringing thing that had once been an interpid French aviator in the Brazilian army, the man Trelaine.

We winced as the big door clanged open, for those noises had meant but a repetition of our suffering, a renewing of the tortures Stein gloated to view. But it was not Stein who faced us. It was the bent figure and mild eyes of the old professor. Craswick, in his rummaging about the city, had discovered Stein's secret torture chamber.

"What is the meaning of this?" he asked, peering at us through his thick lenses "What are you doing here."

"Suffering," snapped Bill, being in no mood for fooling.

"But, but I do not understand. What has brought you here?"

"Stein and his Indian devils."

"But you are not Communists?"

"No, but we're not guards, either. We came into the jungle to discover what was going on in here and why people who flew over this region never came back. I was looking for Señorita Huena in particular."

"Ah, the pretty little girl who came in that swift grey machine. She is away safe enough. Baron Stein returned her the very week she came, sealing her lips with a promise of secrecy."

"Oh, yeah? Say, this boy Stein has put a lot over on you. Did he tell about these?"

Bill held out his arms and rolled over slowly. The professor stared in disbelief at the scars. His tiny finger went out in trembling uncertainty to touch them, as if he could not accept their reality.

"You were not marked in that manner when you bathed at my quarters," he said in a voice that trembled. "What has done this?"

Bill nodded toward the torture instruments that lined the walls. The old man tottered over to them and examined them closely. There was plenty of evidence of fresh usage, for the blood of yesterday had dried over that of the day before.

"The inhuman wretch," he said bitterly. "The monster. The wolf in sheep's clothing. What is the meaning of all this?"

"The meaning is that Killer Stein is up to his old tricks. He's a baron, all right, scion of an old and decadent German family. He lusts for the blood of all but the nobility and he has hoodwinked you into bearing a hand to complete his scheme for destroying the rest of the human race."

"Your accusations are astounding. You should speak before the committee on appointments. The man must be mad."

"He is. Be careful what you do or you'll land here with us. He's ruthless. Nothing can stop him."

"I shall stop him," said Craswick, drawing his scant five feet erect. "He shall not carry on in this manner. The committee must investigate. Luckily he is not within the city."

Two hours later we were free. The little professor had consulted some of his confederates and they had united to release us and demand an explanation from Stein, who had posed before them as very humanitarian.

We had barely breathed the air again when Stein returned in his mystery ship and hopped into the center of things. The angry scientists gathered around him, demanding to know why we had been so cruelly treated by one who posed as the savior of the world's brains.

They had reckoned without their man. Disapproval meant nothing to Stein as long as it was unarmed with force and these doting fools had not taken our warning and armed themselves. Stein whipped out a gun and cowed them instantly with the anger of his eyes. While he faced them, we ducked out of sight and fled through a hall that housed a mighty dirigible that seemed about ready for flight.

Although we sensed that flight was absurd, we did our best to hide. What happened behind us we did not know for several days, but we heard the bark of his automatic once and then an ominous silence hushed the clamoring voices of these men who had been his dupes.

We wound in and out of experimental chambers, peered at queer instruments, marveled at the labor involved in collecting all this material in the center of this jungle. The clamor of pursuit, which had resounded in our ears for the first few minutes, died away. For the time being we were alone in the city of scientific experiment.

I vaguely recognized some of their efforts as akin to those we were following at Schenectady. Some of their men have been recruited from our city of wonders or this might merely be that universal coincidence of duplication so common to important steps of advance in any great field of endeavor.

"Some of these things could guarantee our safety, if we only knew how to handle them," I said. "If any of those fool scientists know enough to keep their wits in the present emergency and to pretend loyalty, they could wreak havoc with Stein's plans as soon as they could reach some of these controls."

"They won't," sighed Bill. "They belong to the upper strata of mentality, while we're in the lower. Deceit of any kind is unknown up there. They're as simple as children, outside their own field. No hope for us there. We've got to blast our own way out."

AGAIN we were fugitives with that net of padding feet going around us and drawing closer. It was good to be free from the dungeon we had known since our coming and we were resolved to die rather than be dragged back to its confines, but death was not for us yet.

We climbed spiral ladders and crept along sloping roofs. We played hide and seek with our pursuers, daring them to follow where we led. More than once we heard the flick of a dart from a blowgun as we fled up and down and in and out until it seemed that there was no corner of Stein's city that we had not explored.

Then we tumbled from a high wall into the girl's garden again.

Stein was present, but we had aimed our descent well. Bill landed squarely on his shoulders, knocking him to earth, and I hit the legs that flayed out behind.

We had him trussed in his own belt in less time than it takes to tell it, while Zaida danced about in glee, and kissed Bill, and crooned over him, and almost did as much for me.

"What's to be done now?" I asked, sitting on the Killer's midsection and mopping my brow.

"No plans yet," grinned Bill. "Where's Craswick?"

The girl stopped smiling. Her little face puckered into a frown.

"He is gone. There was much shouting when Commissioner Stein returned and it was said that the committee resented some action he had taken. I have not seen Professor Craswick since, although I have been told that he was imprisoned."

"With the rest of the fools," snapped Stein. "Soft-brained idots. Saving the world from Communism, unaware that Communism has had no appreciable spread in years."

"Comments not called for," said Bill, cuffing the mouth of our victim as a gentle return for a part of what we had suffered. "Hold 'em until we ask for 'em. What'll we do with this swine, Ed?"

"Eradicate it."

The girl's eyes widened. Bill caught her look. It was plain that she was not accustomed to hearing even the death of such as Stein discussed.

"Killing would be too good for him," Bill nodded, "but we'll not rub him out yet. He might make a valuable hostage, in case of necessity. Let's call a council of war, consisting of just us three."

His words were answered by a series of shrill whoops and we looked up to see the walls topped by lowering Indian faces. At every pair of lips a blowpipe was lifted and there was no doubting the intent of the filthy creatures who held them.

"The lower order of humanity is often more trustworthy than the higher," grinned Stein, squirming out from under me. "You can get a lot out of either strata if you know how to go about it."

He barked to the men. One of them dropped down and loosened his bonds. He turned and took a long look at us.

"I ought to let them kill you here," he said, "but they have another use for you and Zaida is unaccustomed to violence. You boys were rude to tumble in on her like this."

"On you, you mean," corrected Bill.

"On me, in her presence. Will you please return to your former quarters. Slightly crowded, I fear, but then you'll not lack company now."

We certainly did not. Stein had imprisoned the entire committee and a few other Spirits with more altruism than cupidity. Little Craswick smiled faintly at us by way of welcome, shaking his head sadly at this renewal of our plight.

"How're things?" asked Bill, his spirits lighter because of our short, if fleeting trip to the sunshine.

"I fear we are in a bad way," Craswick answered, his narrow shoulders drooping. "The committee felt as I did about your warning that we should arm ourselves before renouncing Baron Stein. We could not comprehend the baseness of his nature. But now we understand all. He has imprisoned every man of us who boasts any ethics. None but the most callous of our band remains in laboratory or test room."

"And there are few of them," sighed one hairy giant who looked more like an exponent of Communism than he did like an intellectual. "I doubt if there are a dozen men left him, not counting the Indians."

"Nine, to be exact," called somebody at a distance, his chains clanking as he sought to get into the conversation.

"If we had rushed him, we might have prevented all this," lamented the giant. "The double-crossing, lying, sneak. Getting me in here with his stories about the spread of Russia's red menace and then turning out to be more menacing himself to humanity in general."

Their stories came out as we listened. The big man was a linguist sent among the tribes of the Amazon to study their customs for the Smithsonian Institute. Wandering into the Xingu region, he had run into difficulty with a tribe over his attempt to learn certain of their secrets. Stein had popped along in time and rescued him from what threatened to be an awkward situation, and filled him with yarns of the spread of the dreaded movement from Russia.

"And I believed him," groaned Staunton. "If I had it all to do over again, I'd stay with the Indians. Those rumors about their use of any stray whites they captured for some sort of sun worship sacrifice might have been far from true."

The Indian guard stirred uneasily, stared at the big man, and moved well beyond the reach of the chain.

"Queer thing, the way that guard left you," I suggested.

The Indian favored me with a stony stare that bade me hold my tongue in language as plain as any tongue ever spoke. I sensed that he understood English, although his face was as stolidly impassive as the countenances of the rest of his race. Now that I studied his eyes they were dull black again, apparently devoid of any show of emotion or intelligence.

Hours dragged in our dismal prison. We listened to the various accounts of our fellow prisoners concerning their former occupations, the means of their being seduced into this city of experiments, and the nature of the work they had accomplished.

Little by little we patched together what no one of them had known before, since Stein apparently kept his own council and allowed no individual to know the full extent of his activities. Here were housed a big dirigible, ready for almost instant flight, and a score of big bomber-type planes.

There were three kinds of deadly gas in the last stages of manufacture, gas that surpassed in power anything ever before known to man. In addition, there were insect hordes ready for release at the will of whoever was in control, pests capable of destroying the crops of entire continents. There was a poison so potent that a single vial of it dropped into the city's reservoir would destroy the entire population of a town of millions. There were guns in the process of perfection that would shoot electric charges of sufficient strength to kill every passenger on an ocean liner if the vessel chanced to come within range. There were other dreams of great destructive forces in the early stages of development, and all at the disposal of this man who had won for himself the name of the most ruthless killer in the German air force.

The meaning of it all sank into our little conclave with a force that the cruelty of our surroundings helped to emphasize. This fiend was intending to conquer the world, to wipe out whole nations if necessary, to rule the earth by terror and a force that was all the more dreadful because of its high state of centralization.

Our knot of victims suffered from the realization that they had contributed, in blind faith, to the terror that was soon to sweep down upon innocent millions. Strong men tugged at their bonds and weaklings pined at our impotence. We were like stunned spectators.

THEN from the very hopelessness of our despair we began to plan. The Indians came but twice daily with our frugal fare. Two of them brought it, one the jailer and the other his assailant. Since we had never offered any violence, they came among us unafraid and ministered to us in their defiant surliness.

While our guard was absent, we passed the word. Staunton would delay the one who stopped to feed him until the other reached Bill. These two were the strongest men in our little company and easily capable of knocking the smaller natives senseless with a blow of their manacled hands.

With the guards removed, they would then attack their chains. Staunton had worked his free from the masonry at one point and felt confident of breaking or freeing the other pin that held him prisoner. If but a single man was free and the guards were downed, the keys could be reached just without the door and our little company set loose. Once free, we felt confident of capturing the city.

"Ten white men and a swarm of Indians," called Bill. "Nothing at all for us."

"Nothing at all," echoed Craswick, who couldn't have felled the feeblest Indian with an axe.

It seemed that dinner time would never come. We fretted and fumed more over the intervening minutes than over our preceding week of imprisonment.

"This thing has got to work," warned Staunton, as the guard left to bring the food. "Stein's big attack is to get under way soon. We can't delay. The safety of the world depends on us."

The Indians came, all unsuspecting. We waited with strained efforts to appear natural. Staunton began his discussion, raised his voice, clamored. The guard halted before him, just out of reach. The other neared Bill.

Staunton was evidently complaining about the food. The Indians bent to the dish and scooped up some in his fingers. Just as he put it to his own lips, the hairy man struck him down.

Out of the corner of his eye he had seen the other guard approach Bill but the noise of that blow attracted the second man's attention. He turned and stared, his stupid face plainly expressing his inability to comprehend what had happened.

A quicker intellect would have carried him to safety but Bill was upon him before he moved. The chains went out and the hands chopped down.

The blow fell short, checked of its mark by the chains. The Indian spun about as the full force of that sweep came down upon his shoulder. For an instant that seemed an eternity to us as we watched, he teetered. Then he fell in a sprawl, straight into Bill's waiting arms.

There were two good Indians among us a few seconds later, if the old adage about the purification of death holds true. In a few seconds Staunton had yanked free the second chain.

We could scarcely restrain a cheer as he lifted the iron ball that hampered his feet and staggered with it to the door. All eyes followed that hairy arm that reached through the crack, for we well knew the peg without where hung the keys.

The arm was gone a long, long time. We could not see the expression on that face that had reached so eagerly for our release but we could read the eloquent motion of those drooping shoulders.

But the full horror of what was in store for us did not dawn upon us until the door opened wider and Killer Stein entered with cocked pistol, one hand firmly gripping the wrist that had been thrust forward for the keys.

"Gentlemen, I regret your lack of appreciation of my hospitality," he said mockingly, "but I promise you a change soon. On Monday of next week I will bid you all goodby. On that day you are to be the guests of our friendly native tribe and thereafter I shall bother you no more. My dirigible is ready to depart. Trusted compatriots will meet me before we begin our bombardment of the world. My plans being complete, I thank you one and all for your co-operation and aid and I trust that you will enjoy the little ceremonies our friends have prepared for you."

It was taunting, overbearing, insolent. Even the mild little professor could have joyfully throttled him for it.

Bill lay in wait as the Killer passed with Staunton on his way to a stronger set of chains. By drawing close to the wall, he had deceived the German into the conviction that he had less space in which to roam than was really allotted him. Bill might have brought down those cruel manacles on the Killer's head if he had not feared that the blow would cause the trigger finger to flex and send a bullet into Staunton.

But the hairy one was finally secured to Stein's satisfaction and the smug jailer passed by on the return. He stepped close to Bill and made some taunting remark about the girl that was in his power. The words were barely out of his mouth when Bill struck.

Had he waited a second more, he must have caught Stein completely off his guard but the man saw the upswing of those arms in time to dodge back. Although he was well beyond their swing, he fired twice at Bill's body.

The companion of my flights crumpled, after flinching before the blows. He moaned, stretched, and then doubled again, as though in intense pain but unwilling to add to our suffering by groaning aloud.

Stein merely curled a lip in disdain and walked away, clanging the door after him.

Half an hour later two more Indians appeared and carried away the bodies of their fellows, gingerly evading us as they moved about and making no attempt to minister to Bill.

"How bad is it, old man," I called softly, having received no answer to inquiries made during that long wait while the Indians were coming.

"Oh, I'm all right," said Bill in a voice that surprised everybody but myself because of its calmness. "Just shook me up a bit."

I knew Bill. He was the bird who had told me in just as steady a voice that he was all right, the night three doctors told me he couldn't live. I was insane to get to him, to give him such comfort as I could offer, but my chains held me.

The hours dragged past. Staunton began to sing. I alone knew that it was to drown the babblings of poor old Bill, who was completely off his head with a fever. We three were separated in a measure from the others and although Bill was now between us, I could converse with the hairy giant without being heard by the others.

Finally Bill grew quiet and Staunton asked. "Know what our little friends are planning to do with us?"

"I haven't the slightest idea. Sell us into slavery?"

"Worse than that. Unless I'm mightily mistaken, I was on a warm scent when I questioned them. Rumor has it that the tribe sacrifice their white captives by staking them in a pit and letting the sun devour them. A very entertaining spectacle for all but the victims, I'm told."

I shuddered at the prospect. Staked to the earth in a bare pit, with that tropic sun beating down upon us, we would suffer worse than men tied to the stake and burned by fire. Our death would be longer, more lingering.

"He couldn't do that," I said.

"Couldn't? Did you happen to run across anything suggesting such a stunt in your rambles about the city?"

I shuddered anew. Now I had an explanation for one puzzling spot we had visited during our escapades. We had found a small open-roofed theater, with a shallow concrete pit in the center. Undoubtedly this was the hall of sacrifice that had been built long before as an evidence of good faith to these ignorant savages whose toil had made Stein's dream possible.

"We'll be their guests, all right," sighed Staunton. "That's part of the hollow mockery of their service. Every wish of such a guest will be satisfied—unless it relates to freedom or to weapons. The end must be as happy as they can make it, although they take no chances of losing a victim."

There was hope in that suggestion but I dared not give word to it. There was no knowing if Stein had a stool pigeon among us and I must hug my secret to my breast. With Bill unconscious I was safe, for nobody else might fathom what made my heart beat tumultuously in my breast during the hours that followed.

Complete despair had silenced my comrades. Even the hairy Staunton was bowed in slumber and fatigue. Bill moaned and tossed pitifully beside me and I wondered what that girl he worshipped would think of Stein if she could see the condition to which he had brought this big bronzed aviator who adored her.

I dozed but little during the night. My comrades were slightly brighter by morning but my weariness concealed that hope that still burned within me.

They discussed the possibility of repeating their attack on the guards but no second chance was offered. The new guards kept their distance and shoved our food and drink to us by means of sticks.

THEN hope sprang up from another direction. Our prison door had opened to admit a frightened faced girl, whose beauty was enhanced by the sad look of concern with which she surveyed us in a wild search for Bill.

But this was no rescue party. Stein stepped in behind her and motioned toward the huddle just beyond me.

Her cry was pathetic as she ran past me and threw herself to her knees before her wounded Billie. Her kisses and sobs revived him, although he had not touched food or drink during the night and morning.

"Bill-ie, my Bill-ie, you are not badly hurt? Tell me you are not. Your Zaida comes to comfort you."

He grinned up at her, controlling his expression with that iron will of his.

"Nothing to it, kid," he whispered, "nothing to it. Just a couple of scratches."

I knew better but I wasn't saying anything. I knew that Bill might be exempted from torture, bailed out by a higher tribunal than ever sat on earth.

"You're going free, Bill-ie," she babbled. "You and your friend are to start out today."

Bill raised on an elbow and stared at Stein.

"And big hearted Killer is going to let me go—for a price. Well, kid, don't you pay it. He'd let us get started, but there wouldn't be enough gas in the tank to get us beyond his reaches. I know that baby of old. He isn't letting Bill Ames free."

"Nor me," I chimed in. "Don't you let the oily snake buy you. You're Bill's girl and it's up to you to stay true to him."

"To the very end," she said, drawing herself up proudly.

Stein leaped forward and drew her back.

"A lot of good it did to drag you down here," he snarled "I thought you'd weaken when you saw him like that. He's dying and you won't save him, won't give him a chance to get to a doctor in time."

"Not a chance," sighed Bill, and slumped again.

I could see that she was weakening but I couldn't let her. Bill had rather click out, than live to know she was defiled by that snake. He'd always been that way about women, even in the worst of the mess in France.

"Stand by Bill," I called, "even in death. That boy's worth waiting for in another world, if Stein does for him. He's the salt of the earth."

Stein dragged her away, weeping loudly, but evidently convinced of Bill's desires. One glance she threw me before the door slammed but I was sure of one thing. Killer Stein would never claim that girl as his bride, not if she had to take her own life.

Somehow I felt happy, in spite of Bill's suffering and the gloom that had settled over my fellow sufferers. Through it all I had one hope and that hope I hugged to my breast in fear lest it be torn from me.

At times it seems that the minutes are hours and under other circumstances days are but minutes, fleeting past before we sense that they are well begun.

But always, inevitably, grandly, majestically, time continues its unaltered pace. Our emotions may make it gallop or delay but always it creeps steadily and relentlessly toward its ever distant goal.

Thus the time dragged past with us until the fatal dawn of that day that was to see us turned over to our Indian neighbors. There was consternation among us and some whispering of dread at the death of our former servitors. I even caught a whisper to the effect that it might be well to blame their deaths upon Bill, since he was already at death's door as a result of his wounds.

But whoever was so base as to offer the suggestion was drowned in quiet hisses. Even in their dire extremity, with an unknown fate confronting them, these men were real men behind their interest in science, ready to share the blame as they had been ready to share the hope for escape, a hope that had, alas, died all too soon.

Before daylight we were summoned by ranks of Indians, who led us in chains from the dungeon in which we had been confined. Solemnly, to the beating of a distant drum, we filed along.

The little stadium was filled with brown bodies in the darkness preceding dawn. A low chant held them, swayed them, as we advanced. There was no mistaking the solemnity of that awful gathering as it awaited our death.

The chant ceased as we approached. Killer Stein stood rigidly at attention near the edge of that pit as we filed past him, flanked by his nine loyal whites, who had planned this whole thing from the very start.

"Ten tough babies," muttered Staunton. "Can you imagine white men standing by at such a ritual, aiding heathens in the perpetuation of sacrificial rites?"

Bill's wasted form was brought and placed beside us as we stood on the edge of the pit. Then a dismal wail started, taken from the medicine man and flung skyward from the lips of the assembled tribe.

I looked high across those tiers of faces and saw the white countenance of Zaida Huena at the top of the pavilion, touched with the first grey tinge of dawn.

I knew instinctively what she planned to do. If Bill Ames died, she would hurl herself to certain death on the concrete floor near him, escaping the future advances of the confident Stein and dying with the man she loved.

I shut my eyes and tried to conceal the hope that I knew must shine in them.

Stein looked up at the sky and turned to the withered chief of the tribe. In native tongue he began a long harangue about his promise to this brother of the wilderness and his joy at the efforts of the tribesmen in creating this city and carrying out the work he had planned there.

From this he came to the matter of a suitable reward and the fulfilment of his end of the promise. He was glad, he assured the Indians, to hand over to them as guests for the ceremonies of the day, these enemies of himself and of the people he had come to know as brothers.

"And all the while he's planning to gas 'em dead within a week," growled the man on my right. "He hates the filthy lot of 'em."

"SO you gentlemen are now the guests of the tribe," he said, bowing toward us. "Your every little wish will be granted, in so far as lies within the power of your hosts."

The drums quickened their beat. A bevy of maidens came dancing out before us, swaying, bowing, winding back and forth as though merely to entertain.

"Say, this isn't bad," called somebody, unaware of what was in store for us.

"Not yet, you poor fool," called Stein, "but just wait. This is a mockery. You are going to get yours. You're guests until they're ready to sacrifice you. You go down into that pit and fry under the rays of the sun."

My neighbors turned to Staunton for denial but he hung his great head, unable to give them false hopes.

The hilarity that had started with the dance of the maidens died suddenly. The drooping figures about me were silent at the proximity of death.

"Go ahead, laugh now, you fool," called Stein, lolling with his nine men under a canopy.

His comrades joined him in coarse jests. There was no evidence of pity in any of their faces.

The dancers swept away. Mock combatants staged a fake battle for our amusement. The chief seemed disgruntled that we did not laugh.

Another song rang out. Then the chief turned to Stein and conversed once more with him at length.

"The old fellow is worried that you aren't having a good time," he stated. "He desires to have you all happy. Want a drink of anything?"

Many of the men nodded. Native wine was brought them in gourds and it flowed freely during the long hours while anxious eyes kept watching to see when the sun should top the eastern rim of the stadium.

The wine drowned all memory. The drinkers babbled and laughed and reached out to tease the dancers on their return. More than one kiss was snatched by men who, under ordinary circumstances would have loathed the sinuous maidens that squirmed and writhed before us.

The old chief roared with laughter at each sign of increasing merriment on the part of my drunken companions and the crowd echoed the shouts with happy squeals. Staunton, Craswick, Bill, and myself alone refused to drink.

"What can make you happy, brooding ones?" called an interpreter. "Speak and your every wish shall be executed as you are the guests of the tribe. Your joy is necessary to our happiness. Will you not drink the wine of pleasure with your friends?"

Staunton looked at the interpreter and then at the chief.

"A wish, chieftain, that the man who betrayed us might be placed beside us."

The chieftain grinned and stared at Stein. The crowd murmured approval. Stein blanched and reached for his automatic.

The old chief frowned and sighed. Then he voiced a sad denial of the request.

The first rays of the sun slanted down toward us. The guards began leading the drunken revelers down into the pit. I could see them, still babbling foolishly, as they were lashed prostrate on their backs, their eyes up to take the full light of that glare that would soon burn upon them.

"A request," I called.

"Requesh for me," babbled a prisoner. "Kiss from them two girls ov'r there. Want to kiss both of 'em. Twins, ain't they."

Since there was but one girl in evidence where he pointed, his request drew roars of laughter that were not silenced until she had kissed him twice and danced away.

"A request," I called again. "A request, O, Chieftain, before I heap dissatisfaction upon you by refusing to be gay."

An interpreter sprang to my side.

"Your request shall be granted if it come within the bounds of reason. What shall it be?"

"Some men desire the kiss of a woman. Some crave the taste of wine upon their lips. But I will die happy if I can again smoke one of my special cigarettes."

Stein laughed and tossed a package to the Indian. I spurned them away.

"I care for nothing but my own brand. My supply was taken from me. I kept them in a silver case."

Stein looked at me intently, as though suspecting some trickery, but sent a messenger for the case in response to the king's request. While the return was awaited, the last space in the pit was kept open for me and poor weak Bill was tethered beside the powerful Staunton, who had battled valliantly but in vain at the end to escape bondage.

The messenger arrived with the cigarette case, Stein signed for it and studied it carefully. I thanked God for the delicate workmanship that had gone into the task of concealing those secret controls.

They handed the case to me. I opened it slowly. Gone was my distaste at killing those who deserved death. I felt an unholy delight, that chills my blood now in memory, at the thought of what I was about to do.

I drew forth and lighted a cigarette. I took a long drag upon it and blew the smoke in the direction of Stein and his confederates.

"Kill 'em," cried Bill suddenly from the pit. "Shoot 'em, Eddie. Give 'em the works."

That mad cry sent Stein into action. He yanked forth his automatic and threw down at me but I had pressed the hidden trigger. The gun clanked to the floor as the clothes dropped in an empty heap between the nine men who sat beside him. Then, in the tense silence that followed, I snuffed out nine more useless lives as ruthlessly as I would have killed as many snakes.

There was a long moment of stunned horror. The king barked a command. A solid row of warriors leaped toward me with spears threatening.

But the spears clattered to the concrete as the warriors disappeared and the gay feathers from their hair floated to earth. Then, to avoid further killings, I gave the old king a dose of the same medicine.

It would have been an easy matter to sweep that stadium with the same death but the wild impulse to do so died instantly as I perceived the terror I had already wrought.

Screaming, fighting, clambering over each other in their mad desire to escape this mysterious death, the mob fled. It fell from the dizzy heights. It vaulted high fences. It disappeared down yawning burrows and raced along narrow streets. Within a minute there was nobody in evidence but a swooning Zaida on the roof and the bound prisoners in the pit.

Zaida claimed my attention first, for I feared that she would pitch from her precarious height to a shattering death on the concrete in her eagerness to reach Bill. I caught her in my arms and ran with her down the long tiers of seats to the very edge of the pit. Then I leaped down to my companions and started setting them free.

The city was deserted when we finally bore Bill to the protection of a residence and placed him on a cot. As Zaida bent over him with the nursing skill so common to women, we tiptoed out and met for a council of war.

But it was evident that there was to be no more war. The savages had fled into the fastnesses of the forest, destroying the bridgework behind them as they fled. We were alone in the mighty city of wonders, masters of the situation.

"There is but one thing to do," I said crisply. "We must kill this dream of power in the cocoon. Let us destroy all the threats the city holds and then depart. It will be a boon to civilization to destroy it and forget."

Cheers greeted the suggestion. With an enthusiasm as great as that with which they had begun their experiments here, these men of science now began to conceal their findings. I left everything in their hands, although they had endeavored to elect me leader after my successful effort to free them.

But I wanted none of it. Bill was the rightful leader I had followed cheerfully on many a venture and Bill was so near to the door of death that I could think of nothing but his safety.

It must have been weeks later that the hairy figure of Staunton burst in upon me, as I waited for Zaida's report from her patient.

"We're satisfied," he boomed, "that nobody could cause any trouble with what we have left. Everything that hinted at our endeavors has been destroyed beyond any chance of giving off harm to future investigators. We're ready to go."

"And we'll not go empty handed, if we don't set out to conquer the world," called Craswick excitedly. "We located Stein's treasure chest. We're all to be rich men."

I looked at Staunton. The big man nodded.

"I think Stein had a finger in the recovery of the treasure the *Eden* confiscated from merchant ships. It must have been some such hoard that financed him here. She was reputed to have hidden millions somewhere, millions that have never been recovered. We found gold enough to give each of us a tidy fortune."

"Thank God for that," boomed a familiar voice behind me.

I wheeled, unable to believe my ears. Standing in the doorway, one arm across the shoulder of his nurse, was the pal I had thought dying.

"Because," Bill went on, "I'll need my share. In spite of what they say about two getting along cheaper than one, I want to be heeled with plenty of the stuff. How about it, Ed?"

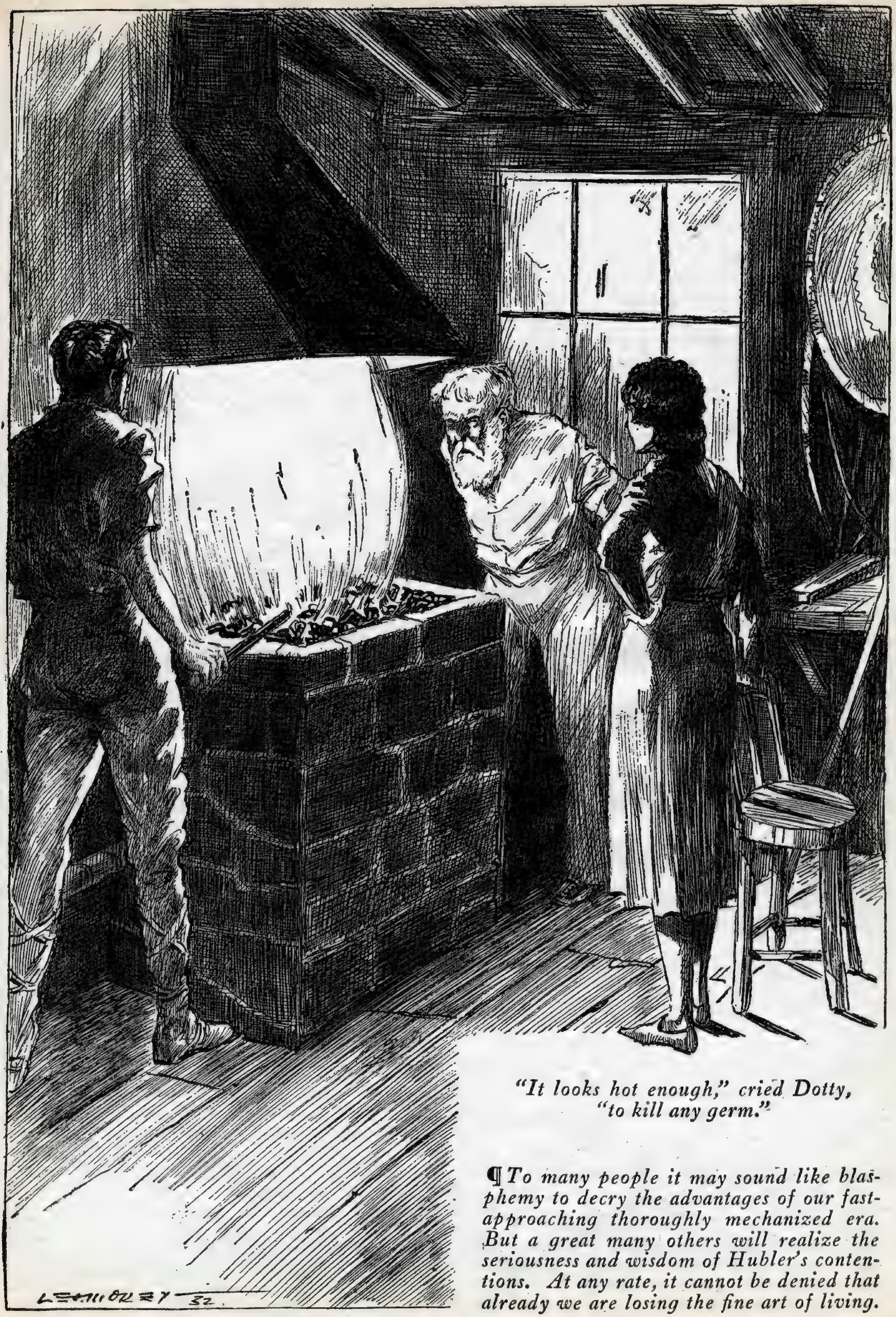
I nodded and grinned. Outside they were warping the dirigible from the hangar, the few hands aided by the many inventions that their clever minds had devised.

"Let's go," I grunted. "Let the Indians have the town."

I couldn't keep Bill and Zaida in Schenectady, although they stopped off on their way to the Falls. Bill said a honeymoon would never seem like the real thing to him without a view of Niagara, but our labs wouldn't hold him. He had to get back to Brazil and that new position as Commissioner of Aviation.

I got a letter from him only a week ago. He had tripped over that city of wild dreams and wilder inventions and noted that it was fast sinking back into the greenery. Trees were sprouting between cracks in the concrete and vines were running over the towers and roofs. And I, plugging away at more problems, could only be glad to know that it was so.

THE END



"It looks hot enough," cried Dotty,
"to kill any germ."

¶ *To many people it may sound like blasphemy to decry the advantages of our fast-approaching thoroughly mechanized era. But a great many others will realize the seriousness and wisdom of Hubler's contentions. At any rate, it cannot be denied that already we are losing the fine art of living.*

The Metal Doom

By David H. Keller, M.D.

Author of "The Revolt of the Pedestrians," "The Eternal Professors," etc.

Foreword and Synopsis:

CIVILIZATION first noticed the menace by their watches. Not only old watches, but even the new watches in the well-ordered safes of the best jewelry shops ceased to function and showed definite signs of decay by rust. Then all metals throughout the world gave way—elevators, subways, metal framework of apartment houses, of business skyscrapers—everything of metal. All means of transportation stopped. Those far-sighted individuals who started out of the cities in the country, who had not entirely forgotten the art of living as it was known before they acquired the science of living in the highly mechanized era of the late twentieth century, survived somehow.

Paul Hubler and his wife, Ruth, and their baby, Angelica, are among the first to move and find themselves a log cabin in the woods. John Stafford, on whose property the Hublers have settled, comes to visit them after several weeks and proposes that the Hublers join his colony, of which he is the leader. They ask to be allowed to remain where they are for a while, but when definite danger threatened—not only them, but the entire Stafford colony—the Hublers moved over to join the rest of the group, and they succeeded in thwarting the invasion of a gang of escaped convicts who were bent on murder.

Then, soon afterwards, Andrew Mackson, the leader of a similar colony in Vermont, visits them, in an effort to get the Staffordites to join the Vermont colony. Instead, however, Mackson goes on a tour across country to get the leaders of the various communities which Stafford and Mackson both believe to have been formed in various parts of the country, to sign a document, which might later turn out to be of similar importance to the Declaration of Independence, this time heralding in a new era to be known as the New Stone Age.

But it is inconceivable that mankind should remain in the second Stone Age. With the memory of former greatness stimulating their great men, something had to happen.

The second phase was a period of world adjustment. Large portions of the earth fell under the power of savage humanity. The Southern States largely became an addition to the territory of Darkest Africa. South America went native. The yellow and brown races of Asia surged westward only to be stopped at the North Fence. Throughout white America the forces of Good and Evil waged a war that could only end with the extermination of one side. Man not only had to fight man for the right to live, but he had to learn entirely new methods of wresting a living from nature.

The third phase is that of victory. It may have taken centuries to go from the first stone age to the first age of metals, but the second change must necessarily be swifter—and is.

Illustration by MOREY

CHAPTER I

Honeymoon

JOHN Stafford and Dotty Perno.

So satisfied were they with the richness of the new experience that had come into their lives, that they were willing to leave all of the wealth of New York for it.

Singly they had come into the great city. Together they had faced great danger and through that danger had been able to find the love they had for each other. Now they were leaving the ruined city together, feeling that nothing could ever part them.

They rode two horses and a third carried their belongings. The weather was beautiful, and, once beyond the city, the country charmed them with its sweetness. Without conference, for they were at that period of life when they spontaneously arrived at the same conclusions without spoken contact, they slowly wore their way down to Port Jervis and from there down the Delaware River Valley to Shawnee. There was no reference made to the past. Everything was just a foregone conclusion. At last they came to a familiar meadow and there part of the veil of illusion snapped.

"I hope," said Stafford, "that we can find another tiger."

"I don't," exclaimed Dotty. "You were just lucky that day. Suppose that beast had killed you? Then what would have happened to me? The next tiger you meet I want you to turn your horse around and run for your life."

"You mean you don't want me to kill any more tigers?"

"That's it. No more tigers or bad men or anything. I simply want to forget there is such a thing as death. I have just found out what it means to live and I want to forget everything else for a long, long time. For years, maybe."

"Just want to be happy?"

"That's it."

"Looks as though we ought to be, up here on Hilltop."

The woman smiled as she looked at the man.

"Sure you will be happy up here with me, John?" she asked.

"Certainly."

"Won't want to run away and spend the evening with Hubler and the other men?"

"I have even forgotten that they existed."

"Not sorry that we stopped at that nice old minister's house and were married?"

"Not at all, Dotty?"

"Then we will stay here forever, just the two of us."

"That's suits me, Dotty."

"And there will never be a cloud in our life?"

"Not even a little one, except to shade you from the sun, or to make the sky more beautiful."

They came to the house of Dr. Perno. It was very much as they had left it months before. Everything was there; the flowers were a little wilder, the grass a little higher, the birds and squirrels somewhat tamer. Otherwise everything was the same. Up the valley, in the haze of twilight the river lay, a silver streak amid the downy cushions of its protective meadows. To the south the Water Gap held up its twin mountains in majestic splendor throwing somber, ominous shadows into the darkening gulf between their mighty sides.

It was a pretty place to build a house.

Stafford took care of the horses and silently put their belongings in place, but the former Dr. Perno, the new Dotty Stafford, simply leaned against a pine tree and looked and looked at the country before her.

"I want to live here forever, John!" she cried.

CHAPTER II

A Woman Dies

IT was a trifle cold that evening and after the supper Stafford built a fire in the large open fireplace. The lovers sat in front of it in happy silence. At last the happy woman said. "Nothing can disturb our happiness."

"But the man, listening, replied with a slight frown as he reached over for his stone ax. "I am not so sure of that. There is someone coming up the walk."

And as he finished, a knocking was heard at the door, and a voice called, "Dr. Perno. Are you there?"

"She is here," answered Stafford. "Who are you and what do you want?"

"I just came down off the mountain. I need a Doctor and they told me there were women Doctors here and that one of them by the name of Doctor Perno lived in the old school house."

"Come right in," invited the woman. "What is the trouble?"

The man came up to the fire. He was a young man, very poorly dressed and shivering from the cold.

"I am Peter Arndt, Madam, and I live up toward the Pocono. When things went wrong the girl and I talked it over and we thought that we would be happier if we were married, even though times were going to be hard. We had a log cabin a little off the road and neighbors were scarce, and none of the city folk came to bother us. Things went better than we had a right to expect, we were doing well and had a nice little herd of cattle, and then—we found there was going to be a baby. My wife's mother came to help and this morning she told me that there had to be a Doctor there—things were not going right—so, I saddled the horse and started out, and you are the first one I could find."

There was not a second's hesitation on the part of Dotty.

"Saddle the horses, John," she commanded.

Stafford went out to obey her. She went to the closet and started looking over her medical armamentarium. It was not a very pleasing or promising investigation; some drugs, but absolutely nothing in the way of instruments. She started to frown, not at all pleased.

Ten minutes later the three were on their way to the home of Peter Arndt. It was a moonlight night, but even with the light from the full moon it was impossible to go faster than a walk. Daylight was breaking when the ride ended. Dr. Perno took her little bundle and went into the log cabin; the two men stayed outside with the horses; Arndt busied himself with feeding the stock and Stafford tried to help him. Neither man spoke of the drama being enacted inside the little home; it never occurred to either of them to go inside. The sun rose in the sky and was at last over head. Arndt sat down on a rock.

"Times have changed," he remarked to Stafford. "Sometimes I do not seem to notice it much and then again it is mighty hard. All morning I have been wanting a knife, a real one, with a razor blade."

"What for," asked Stafford.

"Just so I could whittle. Take a time like this and give a man a knife and a piece of old white pine and it's mighty comforting to sit and whittle."

Before Stafford could reply, his wife came out of the cabin. She looked old, and very tired as she called her husband to one side. "I wish you would hunt around for some tools, John, and go up in the woods and dig a nice bed; cover it with golden rod and asters, and then, when you are ready come back," she said.

"Do you mean?" asked Stafford, in a whisper.

"Yes. Both of them."

"Shall I tell the man?"

"No. I will do that. It is a part of my work."

Some hours later the two of them rode back to Hilltop, just above Shawnee. The ride was in silence; the supper was in silence. It was not till they sat out in the meadow that either spoke. Then it was the woman who began:

"I never realized what the loss of metal meant to woman before this, John."

"Just what do you mean, Dotty?"

"Simply this. Maternity is no longer a simple process; it has become a pathological condition, but we had such valuable aids in the metal age, instruments, hypodermics, surgical supplies of all kinds, that we forgot that every child came into the world at a very definite danger to the mother's life. No doubt since we went into the stone age millions of mothers have died—only I did not know about it, and did not have the imagination that was necessary to visualize it.

"The condition last night was not an unusual one. In the old days with my filled obstetrical bag, I should have had not a bit of trouble in saving both the mother and the child. But I was in the stone age. Think of it! The knowledge and science of the age and electricity and the instruments of twenty thousand years ago. There was nothing I could do. Absolutely nothing. So, I just sat there by the bed and watched her die.

"And she is just one of millions of women who are going to die, John. They are going to die, trying in a blind way to fulfill a biologic urge and perpetuate the race. Some will live and more will fail. And I was happy when we came to Hilltop and I never wanted to see anyone, just live on and on with you, and be happy, but I cannot be happy now, because I shall not be able to forget that woman and her little child.

"We have to have metal back into our lives, John Stafford. Not very much of it. We can do without gold and silver and platinum, and we do not need tons and tons of copper and steel; but we need a little, just enough to make a few instruments. Every community must have some, and someone who knows their use, because, otherwise, the culture and refinement and beauty of our race will die out. The savage, the barbarian will survive, but the women of intelligence will be unable to carry on the torch of existence. We will either go childless or we shall die.

"We have to have metal. Not to build bridges, or airplanes, or ships; not for communication between continents; or for the manufacturing of mighty machinery, but just a little metal to make a few instruments, so our women can be saved.

"We love each other, John Stafford. And that love can only come into its fullest power and beauty when we have a child, but I know, I am sure of it after last night, that if I have a child, I shall die, and I do not want to die. I do not want to leave you; life means too much to me, and I am not sure that you would ever smile again if you went through what Peter Arndt went through today.

"So, if you love me, you will in some way find some metal. We can hammer it roughly with rocks, we can polish it with stone. Thus we can make tools with which to effect more things out of metal. And will you do it, John Stafford, for my sake? Find just a little metal?"

"I'll try," replied John Stafford.

CHAPTER III

A Lone Scientist Despairs

THE selection of Mount Minsi as a scientific laboratory had in it all the elements of a grand despair. For thousands of centuries no one had ever thought of living on such a place. Now it held the home of one of America's foremost scientists.

Anthony Burke had back of him the traditions of all the great scientists of the world. He was as well versed in the history of invention as he was in the exact formulæ of every intricate chemical or physical problem. As an apprentice he had served under a few of the great inventors of the electrical age. He had even contributed more than a mite to the final perfection of television.

Of all the great scientists of the world, he had arrived the earliest at a clear realization of what the red rust of metals would mean to civilization. He spent the first twenty-four hours following the destruction of the hairsprings in watches, in a careful, painstaking survey of the entire problem. After that he selected from his laboratory a collection of chemicals and instruments, all of an absolutely non-metallic nature. He presumed, and rightly so, that a physical condition affecting one metal, steel, would in time affect all metals.

His next step was the selection of a site for a workshop and the transportation of his scientific equipment. Not being a sociologist, he had a clearer idea of the effect of the metal doom on machinery than on the human soul. Realizing this personal deficiency, he called on a student of human behavior and asked for an approximate description of what would happen to the structure of human society under the new conditions. A few hours with this man convinced him that life as it had been under former surroundings would become extremely difficult and all scientific study an utter impossibility. He determined to seek isolation.

On the third day of the new era he was spending all his wealth for the accomplishment of two purposes. One was the building of a stone house on the top of Mount Minsi; the second was the transportation of his scientific apparatus and supplies to that house. He spent his money like water, realizing that the time was rapidly approaching when it would be more worthless than water. The people of the Water Gap were glad to take his money, and to do his work for him, though they considered him insane.

Toward the end of the building operations, he had to work alone, but the final result was rather satisfactory. He had a substantial two-room house, stone walls, a wooden rooftree, and a slate roof. There was a fireplace, as well as ample light from windows. One room he used to live in, the other to work in. There he determined to stay in splendid isolation and to redeem mankind from the curse of the second stone age.

He spent the first year of his study in an endeavor to rebuild his instruments of precision, which had been wrecked by the destruction of their metal parts. He felt that the study of the disease which had wrought such havoc among the metals of the world could only be accomplished by the use of a well-equipped laboratory, and this he sought to organize. At the end of the year he had been able to prepare some metallic-like substances out of organic materials, such as casein and cellulose, but the shaping and utilization of such materials without instruments was more than even his trained mind could elucidate. At the end of the year he had built a workable scales and a very simple microscope.

All through this effort to determine the nature of the Metal Doom he was tormented by the knowledge that he was the first great scientist who had tried to work in a stone age. For thousands of years, all the great students and inventors had been aided by instruments of metal. More and more they had come to depend on these instruments, fingers of steel, arms of copper, brass and bronze. Everything they did, even everything they thought, was tensely and tightly connected with the mineral kingdom. Benjamin Franklin may have thought of harnessing the electricity from the clouds, but he needed the metallic key to aid him.

Anthony Burke placed the primitive scales and microscope on a table and spent long hours, lonely days, desperate months in front of them, dreaming of the past greatness of his profession. He visioned his wonderful predecessors, the Masters of the past, took up each of their great inventions, and wondered how they would have proceeded, what they would have accomplished, and how they would have reacted to their failures, if they had been forced to work in an age of stone.

And he saw, or he thought he saw, that man had risen from the ape, because he had learned the use of minerals. That, and the utilization of fire, had opened a great void between the human and the animal, had made the one a demigod and the other a howling quadruped, digging groundnuts and forgetting from one minute to the next, the determination of the moment past.

He felt, though in that he was obviously wrong, that a race, deprived of metals, would sink back into the past levels of anthropological life. Fire remained, but perhaps even that would some day be remembered vaguely as one of the lost arts.

Anthony Burke passed into the third year of his isolation a miserable mystic. At times he felt that insanity would end his problems for him. He became mentally stagnant. Spiritually he was simply a scientist in despair.

CHAPTER IV

A Celebrated Picnic

"I WANT to propose something, Dotty," said John Stafford to his wife. "Let us go back to the colony and talk things over with Hubler. There is a fellow that has imagination. I bet that if you talk to him about the need of metal instruments the way you talked to me the other night, he will just imagine some way of making use of something or other to help you out. Now, I am just a farmer, sort of a New York cowboy, but he had real ability."

"But I want you to get the credit for the discovery, John."

"That is fine of you, but I simply am not talented that way. We will go and see Hubler. First we are going to have a picnic. What do you say to our climbing Mount Minsi?"

"That would be some climb, John."

"Sure would. I bet no one has been up it since the day the world went smash. Only lovers and fools ever climbed it anyway in the old days, and now there is less reason to go to the top than there ever was. So, let us take some lunch and make a day of it, and if we get to the top late in the day, suppose we stay all night and see the sunrise from the top."

"I believe I should like that," answered Mrs. Stafford.

The climbing of Mount Minsi would have been considered child's play by the experienced Alpine mountaineer. The ascent is gradual, and even in the steepest part there is no decided element of danger. The walk, in the old days, was interrupted by various pleasure houses, built at promontories carefully selected for the splendor of the view at various points. These offered resting places for the tired vacationist. After the advent of the automobile and the decline of the pedestrian, few dared the entire climb. In late years a survey of the Gap from an airplane had become a satisfactory substitute for walking to the top of Minsi. After the early days of the second Stone Age no one had ventured to the summit. The inventor had been left in isolated solitude.

To Stafford and his bride, alive with the joy of life, the conquest of the summit offered no difficulties. Leaving their horses at the first promontory, they arrived at the top of the mountain at the end of a brisk three hours walk. The view from either direction was only limited by the optical deficiencies of the human eye; the beauty of it was beyond words.

But the greatest thrill of the day came when they saw a stone house perched on the highest part of the mountain, and smoke coming from the chimney of that house. A house, fire! These could mean nothing but human habitation.

"I think we ought to call on him," suggested Stafford.

"How do you know it is a him? It might be a her," countered Dotty.

"I do not think so. No woman would live up here."

"She might if there was a man up here and he loved her."

But by that time Stafford had walked up to the door and knocked on it. Always the careful, prepared barbarian, he had one hand behind his back and in that hand was a small but very sharp tomahawk.

A small man with long, disordered, white hair and soiled clothes came to the door.

"Well?" he asked. "Who are you and what do you want?"

"I am John Stafford and this is my wife. We were climbing the mountain, wanted to have a picnic dinner up here, and we saw your house and the smoke and thought we would come over here and have you join us. I mean we should like to have you share our lunch with us?"

The whitehaired man trembled with excitement.

"You will have to excuse my actions," he explained. "I have lived up here for over two years and you are the first people who have come to see me; in fact, you are the first ones I have spoken to in all that time. Living by myself, without any company and worried like I am, has made me a little queer. I would ask you to come in, but you know how a place looks when there is no woman around to look after things. My name is Anthony Burke."

But right there Dotty interrupted him.

"Not the Anthony Burke who invented the magneto-amplifier for the latest model of the Tesla Television Cabinet?" she asked.

"Yes. I did that. At least, they named it after me."

There was no mistaking the admiration in the young woman's eyes. They fairly glistened as she continued.

"Then you are the very man I want to see. I have known about you for years. You had the reputation of being one of America's greatest scientists. After the world crashed we often talked about you and wondered what had happened to you. I do not know what you have been doing, but I know what I want you to do. Can't you make some metal for me? Something that is hard and can be worked into different shapes and given a polish? I don't care what kind of metal it is, just so it can be used to make instruments with. Have you thought about it? Do you realize that women are dying every day because we are in an age of stone? Won't you please use your ability and do something, something for the women in the world and the little babies?"

The man started to cry. He wiped his face with his sleeve.

"That is what I have been working on for over two years," he sighed. "For over two years, and I have accomplished nothing."

"Let's have our picnic lunch," interrupted Stafford.

"You will feel better when you eat one of Mrs. Stafford's meals."

CHAPTER V

An Inspiration

STAFFORD and his bride tried to throw an atmosphere of good cheer and happiness over the lunch. They felt that the inventor was unnecessarily morbid, that he had been alone so much, with nothing but failure for company, that he had become almost psychotic. Dotty particularly endeavored to cheer him and even went so far as to tell a few funny stories. Anthony Burke refused to laugh, but at last he passed the stage of disconnected sentences and became able to take an appreciable part in the conversation.

"Something had to happen to humanity," he remarked.

"You think," answered Stafford, "that if it had not been the Metal Doom, it would have been something else just as terrible?"

"I believe so. You see, the human race was drifting into a mental and spiritual condition that was rapidly making continuance of life on a large scale impossible. Many peculiar and abnormal things happened after the World War. All of the human race was sick.

"There was a marked decline in the moral concept of right and wrong. Everybody became twisted in his thinking. Russia went socialist. The United States, with the control of the world's gold in her hand, went into an emotional, financial panic, and had over ten million out of work and starving. Then, with wheat at thirty cents and cotton at six cents, her economists favored the destruction of the surplus of both crops to raise the price while millions were starving and freezing for the lack of these staples.

"At the same time the people were attending amusements by the millions. Everybody was driving an automobile; the working day was shortened, the working week was curtailed, wages were going up, good positions fewer, people had more leisure than they knew what to do with, the racketeers ruled the cities, and the worthwhile people did not care enough to vote them out of power. Crime ruled, vice flourished, poverty increased. The rich became richer, the poor poorer, the more a man made the more he spent and nobody counted his change."

"Stop!" cried Mrs. Stafford. "Your indictment of society is too terrible. There were some good people before the crash."

"Of course there were," answered Stafford. "But what Mr. Burke is trying to show is that the good people were either not strong enough or sufficiently interested in the welfare of the human race to secure control."

"That is it," answered the inventor. "In thinking it all over, it seems to me that civilization was sick; and it was a rather unpleasant illness. There was something about it that just seemed as though it had grown so fast that its elemental parts could no longer function and that it was bound to decay. Something had to happen, and it did."

"Perhaps it was a good thing," mused Stafford. "Society was sick. Perhaps it had all kinds of spiritual bacteria working on it. Evidently it had reached a point where it could not bring about its own cure. But something had to happen, and I have been all through the change and I believe, Mr. Burke, that when we recover from this illness we are not going to be as sick as we were. We are going to be more unselfish; our vision is going to be clearer. Our value of events is going to be more perfect; little things are not going to upset us so; we are going to be nicer, kinder people than we were and if the time ever comes when we shall be able to form some kind of a government, it will be a better form of republic than the one whose death we have seen. Of course, there has been a lot of suffering, but it may be that out of it will come something worthwhile."

"What John is trying to say," explained his wife, "is that the same thing has happened to the human race that happens to an individual when he is very sick. If he recovers, his health is better than it was before. I am not much of a scientist, but perhaps you can understand our meaning if I tell you that it is just as if the world were purified or sterilized by—by fire; that is what I am trying to say, sterilized by fire and all the impurities and dross and germs burned out and nothing left but pure gold."

"And the red rust, the metal doom, was just a means to an end; it was just a symbol. The metals became sick and collapsed, just as humanity did."

Stafford looked up the valley, and then he looked across to Mount Taminy. He took a deep breath.

"I am just an ordinary farmer," he said at last, "but it seems to me there is an idea there in what Dotty is saying. If the metals were sick, perhaps they could be cured by fire."

Anthony Burke sprang into the air as though touched with an electric current.

"That's it! Oh! Why couldn't I have thought of it myself? I had fire all the time. Common sense ought to have told me. And I had to wait till a farmer and his wife pointed the way. Perhaps it will work and perhaps it won't, but at least it ought to be tried. Until we do try, we won't know. Mr. Stafford, you and your wife go and get your things and come up here and live with me and help me. You have to be in on this. It is your suggestion. Fire! Oh! Hurry! I cannot wait till I get started."

CHAPTER VI

A Little Piece of Iron

STAFFORD left Dotty up on the mountain with the old inventor, while he went back to Hilltop. Returning, he brought the three horses well laden with necessities of life. After a night's sleep and a well-prepared breakfast, perhaps the most satisfactory meal the scientist had eaten for months, the two men started to prepare a furnace, while the interested woman looked on.

Burke realized that he would need a high degree of heat. For fuel he had coal, charcoal and wood. None would give sufficient heat without a forced draft; so the first thing necessary was a bellows. A bellows of wood and skins was not the easiest thing in the world to make. Thus, the first day passed with little or nothing accomplished. A week likewise went by. In fact, it was a month before the crude furnace was made. The chimney was of stone and cement, the fuel was anthracite, and a porcelain crucible properly placed above the fire was to hold the red rust.

Stafford and the inventor had made a special trip to the D. L. and W. tracks to gather the red rust. The porcelain vessel was filled with this heavy powder; in fact, it was packed in as tightly as possible. Then the opening into the furnace was closed with stone and clay, and the fire underneath started. Stafford and Burke took turns at the handle of the bellows, and there was no doubt about the heat that was being generated.

"It looks hot enough," cried Dotty, "to kill any germ."

At the end of three hours the fire died away. There was nothing to do now except to let the furnace cool off and break it open. Followed anxious hours. At last Stafford took his stone ax and carefully smashed out a hole in the furnace. There was the porcelain pot, blackened but unbroken. It was still too hot to touch. They had no way of taking it out, and they could not see what was inside it.

"I cannot wait!" cried the inventor.

"You are just like a child before Christmas," laughed Dotty. "Come and eat your supper."

The next day they pulled the porcelain pot out of the furnace. The red rust was gone and in its place, at the bottom of the vessel, was a mass of a black substance, which had a peculiar glisten to it.

"The metallic luster," cried Burke. "It looks like iron, it feels like iron, pure iron."

He turned the crucible over and the piece of metal dropped out. Stafford caught it before it touched the ground.

"It bends," he commented.

"It's malleable," commented the scientist. "Get me your stone ax. See! I can pound it into shape."

"I wanted it to be hard," complained Dotty.

"We can harden it. We can do anything with it that we used to. The important thing is that we have it. And if we have iron redeemed from the red rust, we can do the same thing with copper, and gold and nickel and tin. We can make brass as Tubal Cain did. All we need now is an anvil and something to hold the piece of iron with and then we can do anything. We can make tools, and, once we can make tools, we can go on and redeem society. Think of it! Stafford. *We are out of the stone age.* One experiment, one success, *one little piece of iron marks the transition* into the new age of metals."

"I want you to hurry up and make my instruments," urged Dotty, now more than ever the old Dr. Perno; and yet, she was not the woman of the past. "Make your tools as fast as you can and then make some steel. Women are dying every day, and it may be my turn to die some day."

CHAPTER VII

The Metal Workers

THE piece of iron made on top of Mount Minsi is one of the most valuable possessions of the new Republic. Its recovery from the red rust of the D. L. and W. railroad tracks marked the end of the Second Stone Age.

Men had recovered the use of metals, but, though they were free from the tyranny of stone, they were still poor, as far as the abundance of all metals was concerned. The red rust was reclaimed as fast as possible, but it took a large amount to make even a little piece of healthy metal. When the mines were again worked, it was found that the metal ores under the surface had also been affected. Consequently, the world emerged into an age where every piece of iron, copper or tin, was of the greatest value. In fact, one of the earliest laws of the new nation was one regulating the use of metal and allowing it to be used only for certain definite purposes which would serve best the good of the national life.

The news spread. The idea was so simple, the technique so easily learned that soon all the little colonies were reclaiming metals from the red rust. They soon found, however, that it was one thing to obtain the metals and another to work them into valuable form. Metal workers, who understood the hand-working at the forge, the hammering of a piece of hot metal into a horseshoe, or the tempering of a piece of steel till it was able to take a razor edge, were few. For fifty years man had worked on metals with machinery instead of with his hands. Now there was no machinery. Everything had to start at the beginning of things. There was no essential difference between the metallurgy of the Phœnicians and that of the members of the Stafford Colony. Perhaps the men of Tyre and Sidon were more expert.

With the reclamation of metals came a new courage. The thinkers realized that it would be long before the old civilization was restored; the great leaders were not sure that it was worth the effort to bring it back. Mankind had learned the lesson of false values, of fictitious wealth, of cruel monopolies. There was bound to come a reaction, an effort to once more use the great inventions of the past, but with this determination came another thought, that much of the hardness of life that had come with the age of electrical machinery must be avoided in the new metal age.

The desire to work with the metals was overpowering and universal. No matter what else a man or woman could do, he or she wanted to make something out of iron, copper, or tin. During the months of deprivation, humanity had been hungry for the little pieces of metal that everyone had taken for granted for hundreds of years. To a woman, the making of a needle, the gradual sharpening and polishing and the laborious boring of the eye seemed to be the greatest cause of happiness, and, once it was made and threaded and sewed with, there came a great sense of accomplishment. In the same way the men worked to make knives, hinges for doors, forks to roast meat on.

Gradually, as the metallic necessities of life were obtained, the scientists began to restore, in the simplest ways, the mechanical greatness of the former age. The population was so reduced, the poverty of material things so great, that it was realized that mass production would take years to materialize, but the great men wanted to leave a record of the past, while that record was still fresh in the memory of the living generation. Thus, one set of men built an automobile, another a typewriter, while a third group cut out type and began a crude printing press. The most interesting feature of communication was the complete loss of interest in the telephone and telegraph and the frantic effort to manufacture and put into use wireless. Within a year each little community had the ability to send and receive messages.

With the restoration of rapid communication came a rapid renewal of the bond of sympathy between separated groups. Men again began to talk of the possibility of restoration of state and national government. While the intensive centralization of the past was to be avoided, it was felt necessary to have the entire United States in close touch. It would never be the old nation, but the thinkers hoped that it would be a better one. Mackson's Constitution was taken out of the pigeon hole and carefully considered. It became the foundation for the new Government.

From the first a constant effort was made to avoid the economic and social errors of the past. It was realized that there existed a profound functional difference between men, that some would be industrious and others indolent, some become wealthy and others remain poor, some achieve a high intelligence while others would remain morons. But all the colonies decided that every man, so long as he obeyed certain ethical commandments, had a right to the necessities of life. There would remain hardships but no poverty, luxuries but no men of super-wealth. The gulf between rich and poor was wiped out. At the same time the right of the individual to live his own life was respected. He could live as he pleased and work as he pleased, so long as he contributed a substantial tribute to the public welfare.

The underlying thought was that there should come the greatest benefit from the new metal age with none of the previous hardness of life.

CHAPTER VIII

The Curtain Drops

"YOUR husband," Stafford remarked to Ruth Hubler, "has become one of the great men of the new era. I believe he could be the first President of the new Republic if he were ambitious for honor. It was all due to his imagination."

Ruth sighed. "Even with his great imagination," she said, "I feel sure that he never was able to imagine how lonely Angelica and I have been for his company. Of course, I wanted him to do all he could for the Stafford Colony, but it does seem as though he might be able to spend a little time with his family."

"You ought to be proud of him, dear," said Mrs. Stafford.

"Oh! I suppose so. Come, Angelica, say good-bye to the twins and we will go home."

So, they said good-bye to John and Dotty Stafford and the two little Stafford babies and went to their home.

There was no doubt that Paul Hubler had been away from home a great deal. Pleading business and important engagements, he often left early in the morning and did not come back till Angelica was asleep. The little girl was not sure at times as to whether she really had a father or not.

The Stafford Colony was a flourishing one. From the first it had possessed a number of well-educated people who, in addition to their intelligence, were blessed with common sense. The women who had come from Shawnee had all married. In fact, there was not one bachelor or old maid in the colony. The health of the community was excellent and the large number of sturdy babies gave promise of a wonderful future. Already plans were being made for the opening of a community school.

Dotty Stafford had attained her desire. The little ten-bed hospital was equipped with all the instruments needed to care for the emergencies of the Colony. From the day the first piece of iron was made she worked intently on this problem. The instruments she had made were not the beautiful polished tools of the past era but they were far better than the nothingness of the Second Stone Age. To the credit of her determination it can be said that no more women and children died for lack of proper care. Her husband felt that she was more of a doctor than she was a wife, but had to admit that she made a wonderful mother.

One morning Hubler actually slept late and had breakfast with his family. As a further surprise, he told them, at the breakfast table, that they were all going on a vacation, and that he would be ready to start right after dinner if they had their clothes packed. To show them he was in earnest, he drove around in a two-wheel cart, and, tying the horse to the post in front of the house, started to help carry out the bags.

They had a cold dinner and then started off. Ruth and the little girl rode in the cart on top of the bundles of clothes and bedding, while Hubler walked in front of the horse, his stone lance in hand and his bow and arrows slung on his back. He was one of the men who clung rather lovingly to the weapons which had served him so well in the dark days of the past.

It was fall. The roads were covered with autumn leaves. Ruth made a coronet of the brown and golden beauties for Angelica. They had a merry time, and the two women so thoroughly enjoyed themselves that it was not till the horse stopped and the husband announced the end of the trip, that they realized where they were. And then Ruth gasped.

They were back at the old farm, back to the house that had sheltered them on that momentous escapade, when they had fled from the city of ruined hopes.

They were back home!

The house had been repaired; the door no longer sagged but swung on three sturdy iron hinges; the roof was as good as new. The fences were in perfect order and the gates were so perfectly grand. Two cows grazed contentedly in the meadow and there were a goat and a kid. The little barn was swept and in order and the spring of water was singing a song of welcome. The happy woman jumped from the cart and ran into the house. Everything was clean, a polished kettle hung over the wood in the fireplace. All that was necessary was to start a fire and begin to cook supper.

"It's perfect!" she gasped to her husband who had followed her into the room. "Who ever did it all?"

"I did. At least most of it. I have been spending my days here for ever so long. You see, I wanted to surprise you."

"And are we going to live here, Daddy?"

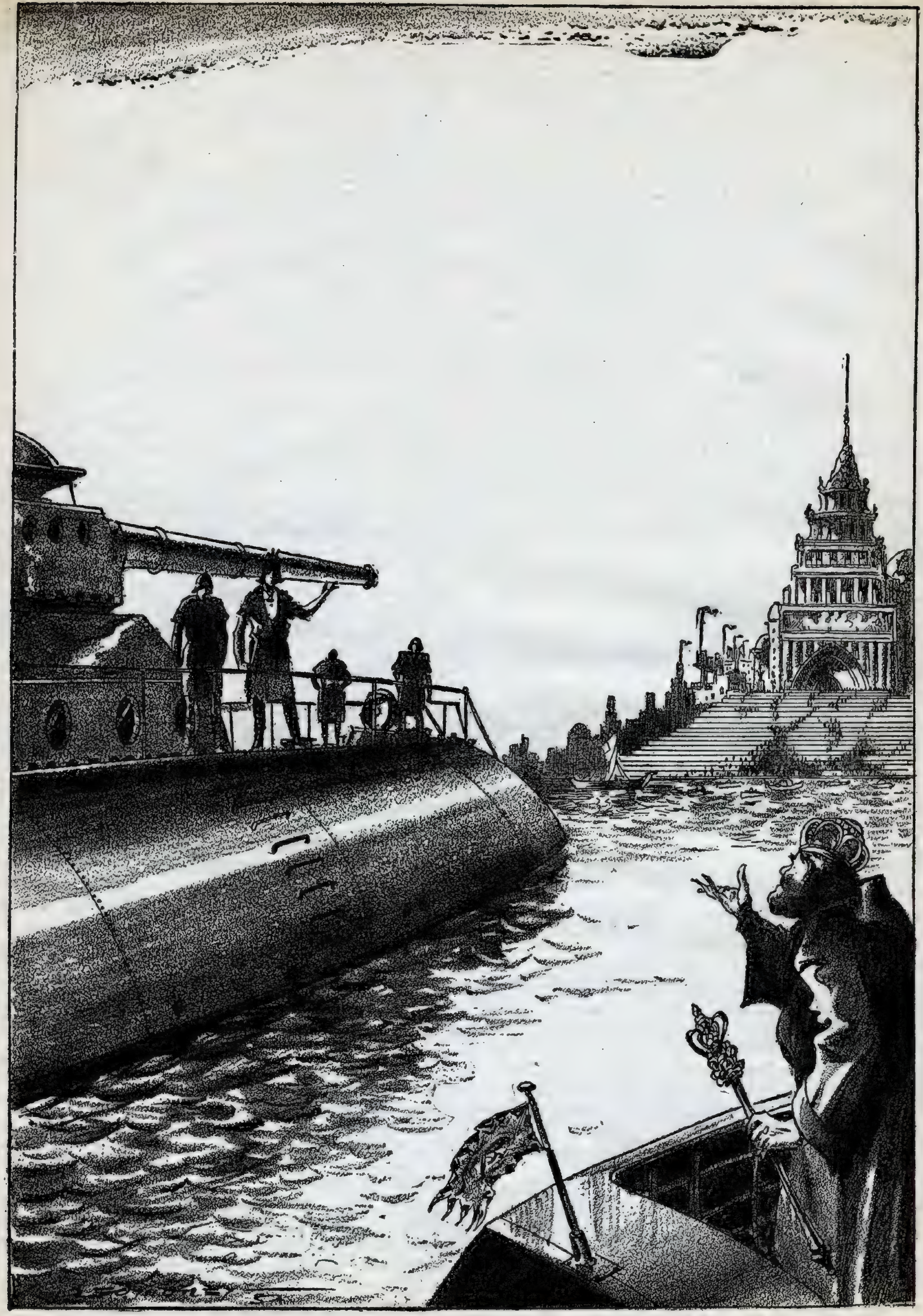
"You bet we are."

"We are going to be happy!" cried Ruth. "It will be just like living in the dear old Stone Age all over again."

"Exactly!" agreed Hubler. "We will have all the happiness of the Stone Age and most of the conveniences of the metal age. If the disaster served no other purpose, it at least drove us out of the city. Everybody is happier if he can plant his feet on old Mother Earth, and I hope that never again will cities rise as they did in the past, giant beehives, where all individualism was crushed and where the struggle for existence overshadowed the really worth-while parts of life."

They had a wonderful afternoon and a delightful supper. Just as they were clearing up the dishes, they heard a sound of shouting down the road. From force of habit, Hubler jumped for his stone ax. It was needless.

(*Continued on page 355*)



When the priests came out at dawn . . . they found the ghostly shape of the vessel lying in the sacred lake. . . . Without hesitation, the High Priest stepped into a small boat and was rowed to the Arcgu.

The Lemurian Documents

By J. Lewis Burtt

No. 5 The Sacred Cloak of Feathers

IF there is truth in the legends of ancient days—and we have no proof that there is not—it would set us wondering on just how much our present civilization has progressed over ancient culture. In this series by Mr. Burtt it is brought to us with striking vividness how many strides were made in the field of mechanical science, that we fondly think we are entering for the very first time in history.

Illustrated by MOREY

IN the olden days when the peoples of Mur were still primitive in their ideas, symbolism played a great part in their lives. Among such symbols as still remain to us, is the Royal Cloak of Sacred Feathers, which is prized not only for its history but also for its beauty.

Our little sacred bird, the "keewata," which has always been very rare, produces on each wing a beautiful feather of the royal black and gold. Each year at the "Feast of the Planting of Crops" as many as may be of these birds are captured and the two royal feathers removed from each, the birds being afterwards released.*

The few feathers thus obtained are added to the skirt of the cloak, which, in the course of some thirty cycles of history, has become long enough to require a train bearer. The most remarkable thing about this wonderful cloak is that the oldest feathers—which must be at least ten thousand years old—are still as brilliant and perfect as the newest ones.

This cloak symbolizes the royalty of our emperors and is the mark of their world supremacy.

Towards the end of the thirtieth cycle, Mur was defeated by the Mingans, our northern enemy, and for some years lost her supremacy. During this period the royal cloak was smuggled out of the palace and hidden away for safe keeping by two of the higher priests. The priesthood of that day held and taught that Mur could not be overthrown so long as the sacred cloak was in her possession.

These two priest were killed during the course of the fighting, but one of them managed to pass on the secret of the cloak's hiding place. Unfortunately, the communication was overheard by a spy from the land of Ecparu, which lies to the east of Mur. This spy, or some of his friends, stole the cloak and smuggled it out of the country into Ecparu.

For a time Mur was not powerful enough to demand its return from Ecparu, but when she had at last regained her power—thanks to Dyd-Allu and his conquest of the air—she decided the time had come to recover the cloak. That it still existed no one doubted, for no nation would destroy such a symbol of world domination.

The people of Ecparu were by no means unfriendly towards us, but we believed that they would never willingly surrender the cloak of their own accord. We did not want to force our neighbor into a war over this thing, yet the popular feeling, encouraged by the superstitious priests, was running high.

Accordingly the All Serene called the Council of Princes and suggested that a voluntary expedition set out to recover the cloak, either by stealth or by some kind of a bluff.

Among the numerous volunteers was a young prince, named Jason, who had recently been experimenting with a craft which could be used under water. He put up the argument that his under-water boat was the ideal contrivance for a secret expedition of this kind and, so convincing was he, that he was finally chosen to lead the expedition.

He selected a crew of fifty nobles, several of whom were princes of high rank and great fame, and, one moonless night, armed with a royal warrant and commission, they slipped silently out of the harbor of Rapani.

---

* An exactly similar custom obtained in historical times among the Hawaiians. The Hawaiian Cloak of Feathers now carefully preserved, is estimated to be worth over a million dollars.

Their ship they named the *Arcgu* (or *Actu*) in honor of the All Serene, "actu" being the family name of the dynasty of that period.

THE journey to the borders of Ecparu was without particular incident. The ship proved very seaworthy and efficient, although its speed when submerged was not great. As a rule they traveled on the surface, only submerging when in danger of being sighted by other vessels. When, however, they came near to Ecparu, they traveled by night, lying submerged during the daytime.

After considerable discussion they decided to send a party of three ashore to reconnoitre. Accordingly, three nobles, all of whom could speak the Ecparian language fluently, were chosen.

These men were dressed in the Ecparian costume and made to look as much like native students as possible. They were set ashore during the night at a place a few miles from the capital, and secret, city of Takana, Jason having arranged to have a boat at the same spot every seventh night until their return.

Twice the boat was sent without meeting the party, but on the third occasion they found their friends waiting for them.

Their report to their commander is best given in their own words:

"Honorable Prince Jason, and fellow voyagers, we have spent thrice seven days in the land of Ecparu disguised as natives of that country, and we have to make report as follows:

"On the first morning we traveled along the road towards the capital city of Tacana, and as we walked, we heard cries proceeding from a ravine which bordered the road. Investigation showed that a small child had fallen from the road—he had probably been running along the parapet—into the gully. Fortunately, his clothing had caught in the branches of a small tree some ten feet down, and there he remained suspended.

"Judging by the quality and intensity of his cries, he was not seriously hurt, but his position was undoubtedly precarious. If his clothing were to give way, he would be dashed to pieces on the rocks some three hundred feet below.

"By dint of much scrambling, and with the support of a short rope made by fastening our belts together, we were able to reach and rescue the little lad, who thereupon took us to his home about a half mile further along the road.

"When we arrived there, we discovered that his father was a minor officer of the city guard. His gratitude was heartfelt, and it was eventually through the friendship that we formed with him, that we were able to enter the forbidden city and gather the information we needed.

"We soon discovered that no one—native or foreign—was allowed to enter the city without special authority, and for a time it seemed as though we were to be foiled in our purpose. Our friend the guard—who had taken us for student travelers from a distant province, who had been robbed of our paper—was sure that we had no chance of getting in.

"During the days that followed the rescue of the boy, we enjoyed the hospitality of our newly found friend, who regaled us with stories of the great city. One of these stories struck us as interesting, and will, we think, give us the opportunity to dictate terms to the Ecparian emperor.

"In the centre of the city is a lake of some two square miles in extent. This lake is salt and rises and falls with the ocean tides, although there is no visible connection between them. The Ecparians have a saying that their empire will stand until an enemy ship sails into the sacred lake—a feat to all appearance quite impossible.

"Now it seemed quite obvious to us that this lake is connected with the ocean by some underground channel. Acting on this assumption, we searched the shore for several miles in each direction from a point opposite the capital.

"Finally, at low tide one day, we discovered, almost submerged, the mouth of a large tunnel into which the sea rushed with a considerable current. This was obviously what we sought, but was it big enough to let the *Arcgu* get through?

"Further discreet inquiries of our friend, the guard, elicited the fact that there is an old legend to the effect that, in ancient times, a sea-monster—apparently a whale—was occasionally seen in the lake. The natives believed it to be a god. Hence the sacredness of the water.

"This god has not appeared within many cycles, and the natives believe that he is taking his period of rest—he appears to sleep and wake in periods of ten cycles at a time.

"To us the question of the god's sleeping was of far less importance than the question of whether his absence was not due to the channel having become blocked. Investigation of this point was likely to prove difficult, but we decided to attempt it.

"Accordingly, at low tide next day we swam in through the tunnel. We found that it very soon opened out into a huge cavern some three or four miles in extent. At the far end of this cavern, so far as we could tell from the currents, the water again entered a narrow tunnel.

"From the shoreward end we could not find the opening into this second tunnel, but from the rush of the water as the tide came in, we judged that it was well below the surface, and probably very large. The only thing left to do was to get into the city in some way and investigate from the landward end.

"Our friendship with the guard now proved invaluable. By professing a keen interest in the things of the city, and particularly in the sacred lake, we eventually persuaded him to let us into the city one night when he was in charge of the gate. For us to be caught meant death for all three, and probably for the guards as well, so we had to promise that we would return to the gate well before daylight.

"This gave us a few hours to look around in the moonlight, and also for a swim in the sacred lake. This latter act was supposed to bring great blessings, which blessings however, we expected to be of more benefit to us than to Ecparu.

"We are all expert swimmers, so we decided to spend the whole night searching the lake for the hidden inlet. Fortunately for our plan, it is a common practise among the city dwellers to swim in the lake on moonlight nights, so we did not expect to attract much attention.

"The night's work proved very exhausting, as we had to make many deep dives along the seaward wall of the lake, but at length we were rewarded.

"There is an opening about fifteen feet below the surface (at low tide) through which the water enters. This opening we estimate to be large enough for the *Arcgu* to pass through, but at some time or other, a huge boulder has slipped from the ceiling and lies in the passageway. Unless we can remove this boulder, we cannot take the ship into the lake.

"It was nearly dawn when we returned to the gate of the city, and we were roundly scolded by our friend for taking such risks. However, we got out without being detected and returned with our friend for a farewell meal.

"About midday we took our departure, ostensibly to return to our own province and secure new papers.

"This, Honorable Prince, is our report. We believe that, if the boulder can be removed, the *Arcgu* can be taken into the lake. Once there, we can command the royal palace with our projectile throwers. Add to this the effect of the old legends, and the superstitions of the people, and we should be able to dictate terms without much opposition."

There was practically no discussion. The recommendation was adopted at once.

NEXT night the *Arcgu* crept silently in to the coast until she was just off the mouth of the tunnel. They did not dare to attempt the entrance in the dark, neither did they feel it safe to turn on their searchlights until they were well inside the passage. To avoid detection, they covered the small part of the deck, which was not submerged, with masses of seaweed. This they did by the simple process of diving and coming up under a big patch of the weeds.

As soon as it was daylight, they very slowly and cautiously approached the inlet. Once inside the channel, they turned on their lights and found that they had plenty of room to spare.

Without incident they made their way through the tunnel into the great cave and across to the other side. The finding of the outlet tunnel proved to be more difficult than they had anticipated. Eventually they discovered it hidden away behind an outjutting point of rock, which made the entrance into it particularly difficult.

When at last they succeeded in getting into the passageway, they had to proceed with extreme caution, as their estimates of the position of the boulder were only very rough ones indeed.

After creeping ahead for nearly half a mile, they sighted the obstruction in front of them. The ship was stopped and divers sent out through specially designed locks.

When they returned, they reported that the rock was not particularly hard—a type of hard limestone apparently—and that it could be broken up quite easily by a moderate charge of explosive. The only risk was that the shock might bring down more of the roof and block the passage entirely.

The ship was now backed out of the tunnel into the cave. Here they could work in comparative comfort and at the same time in perfect concealment.

When all preparations were made, the ship again entered the tunnel and the divers were sent out to drill the holes for the explosive charges. This operation took several days, as the divers could only work very slowly. During the rest intervals, the ship returned to the cave, and once they went out into the open ocean for a few hours, as they had begun to find the atmosphere of the cave very depressing.

At length everything was ready. The explosives, in their waterproof cases, were all in place and connected to a specially devised detonating machine. This was set to explode the charge about two hours after being put in motion.

Having started the machine, the two divers hurried again into the ship, which immediately backed out of the tunnel and well away to the middle of the cave. After a while a dull thud sounded and, a few seconds later, a wave of water, followed by a cloud of rushing gas, leaped up from the opening. The disturbance was so great that Jason did not deem it safe to return to the tunnel for a considerable time. In fact, not until the change of tide.

It was late evening when the explosion occurred, as Jason wished to emerge into the lake during the night. By this arrangement the *Arcgu* would be already on the surface when dawn should reveal her presence.

A little after midnight, they crept back into the tunnel. The boulder had been split into half a dozen fragments, but had not been blown entirely clear of the fairway. However, by dint of very careful maneuvering, the vessel was just scraped past and out into the lake.

Scarcely moving and almost submerged, she stole across the water until she was within some two hundred feet of the temple landing.

WHEN the priests came out at dawn to perform the ceremony of the "Adoration of the Sun," they found the ghostly shape of the vessel lying in the sacred water.

Amazed and terrified by the apparition, they fled back into the temple and sounded the alarm. Within a few moment, dozens of priests were gathered on the steps gazing in wonder at the great ship, which by now was plainly visible.

Without hesitation the High Priest stepped down into a small boat and was rowed swiftly out to the *Arcgu*. As he approached, Jason, arrayed in his royal robes, greeted him with the formal salute, which the priest returned, though somewhat awkwardly. He was evidently not accustomed to standing upright in small boats, and his dignity suffered in consequence.

"Who are ye? How came ye hither?" he asked in as steady a voice as he could command.

"Greetings, Priest," replied Jason. "We are ambassadors from the thrones of the All Serene and All Wise, the Emperor of the land of Mur. The means by which we came is known to ourselves alone."

"Come ye in peace?" went on the priest.

"In peace, if so your emperor wills. Mur desires friendship with her neighbors. She seeks this friendship not because she is weak, however, but because she has the power to enforce her wishes."

Send therefore to your emperor and tell him that we will have audience with him in his Council Chamber at high noon. Bid him send a guard to escort us to the palace. Assure him that we come as peaceful ambassadors and that, as such, we require safe conduct.

"Look, priest," continued Jason, indicating the great gun mounted on the deck, "With this weapon, which is now trained on your temple, we can, if we wish, destroy your city within a day. Therefore see to it that there is no treachery."

"Your message shall be dispatched, honored prince," replied the High Priest. Then, his curiosity overcoming even his love of formality and ceremonial, "Tell us, prince, the thunder and the agitation of the sacred waters that, from a clear sky, last night——"

"Yes, priest," interrupted Jason, "we know all about that. Perhaps the thought may convince you of our power." And aside to his supporters he whispered, "We are in luck. These people evidently are not acquainted with explosives!"

THE formalities over and a messenger dispatched to the palace, a gang-way was let down and the high Priest was invited on board.

A great many of the wonders of the vessel were shown to him. Despite his age, he behaved rather like a small boy on his first picnic—but the fact that they could travel under water was not mentioned. Jason thought that a little mystery would be good for the old priest. Priests were so fond of mystifying other people, but a little of their own medicine should be good for them, was his view of the situation.

Shortly before noon, Jason and two of his lieutenants, together with the high Priest, went ashore in the launch. At the landing stage they were met by an armed guard, which had considerable difficulty in keeping back the crowd, and they were escorted to the palace.

Exactly at noon they entered the Council Chamber, where the full Council of Princes was assembled, and proceeded to the foot of the throne.

After acknowledging their salute, the king proceeded with the formalities of introduction.

"Who are ye, and whence come ye?" he asked.

"We come in the name of the All Wise, the All Serene, the All Powerful, the Great and Only Emperor of Mur, whose power extends to the ends of the Earth," replied Jason. "From his capital city of Rapani, we, his Ambassadors and Plenipotentiaries, come to Ecparu in peace.

"Our mission is to conclude an alliance of perpetual friendship between the empires of Mur and Ecparu, that our two nations may henceforth dwell in peace and unity as elder and younger brother."

"Princes of Mur," replied the king, "we accept the friendly greetings of your emperor and, in return, offer to him our salutations.

"Regarding this treaty of peace, however, what powers have ye to act in the matter?"

"King and Princes of Ecparu," answered Jason, "we have here written authority of our emperor." So saying, he handed to the king a scroll bearing the royal seal, and continued:

"We have, as you see, full authority to conclude a treaty of friendship according to our judgment of what is right and fitting, without reservation, save in one thing only——" He paused and looked around at the councillors—— "Long years ago, by treachery and stealth, certain men of Ecparu did steal from Mur the Sacred Cloak of Feathers, the symbol of world authority. Our emperor directs that, before we conclude any treaty whatsoever, this sacred cloak shall be returned to us, both as a guarantee of your national integrity and as an acknowledgment of our supremacy."

At the bold, and perhaps somewhat arrogant words, the nobles looked at one another with a questioning look, as if they would ask, "What next is coming?"

Ignoring this look, Jason went on.

"You have a prophecy that Ecparu shall stand until an enemy ship shall enter your sacred lake. At this moment you are wondering as to the fulfilment of that prophecy, and are at a loss to interpret it.

"Let me, therefore, explain to you. Our ship is, as you can well see, floating on the waters of the sacred lake, *but* at present it is *not* an enemy ship. Therefore Ecparu still stands. Whether your great nation shall continue to be great, rests with you.

"We of Mur desire peace. We are haters of war. Nevertheless we are no weaklings, and we have the power to enforce any terms we care to dictate. The weapons on our ship could destroy this city and all in it within a day, should we so choose.

"We hold, however, that for a nation to be really great, it must also be just and generous. Therefore, we seek an alliance rather than a conquest. We desire no control over your land, but we wish to see you a free and great brother nation, and so we repeat that our only condition is the return of that which is rightly ours."

As he ended his speech, Jason looked around again. The expression on the faces of king and councillors was one that puzzled him. They appeared to be friendly, yet there was a look of hesitancy, almost of fear, on their faces.

Then the king spoke, a note of regret sounding in his voice so clearly that it was impossible to doubt his sincerity.

"Friends of Mur," he said, "Gladly would we comply with your reasonable request. We acknowledge that Mur is the greatest power in the world. For many years we have desired to make amends for the wrong our fathers did you in stealing your sacred cloak"—at this the Lemurians looked at each other in surprise—"but, alas! we no longer possess it!"

"We accept your assurances, O King," answered Jason, concealing his surprise and disappointment as well as he could, "yet our emperor's word forbids us to conclude any treaty without it. Tell us, therefore, what has become of it, that we may make report and learn our emperor's will in this matter."

"The cloak," explained the king, "was stolen from us, even as we stole it from you. Away in the fastnesses of the mountains there is a nation of men, who for generations have been our enemies. Great warriors they are, and, although we remain unconquered, yet we cannot subdue them. From time to time they send raiding parties down into our valleys, and on one occasion, one of these parties penetrated even into this, our sacred city of Takana.

"They looted our temple and destroyed many of our sacred emblems. The sacred vessels and the cloak of feathers they carried away, and today their king proclaims himself 'Emperor of the Earth,' because he has the symbol of supremacy. We fear it is impossible to recover it."

As the king finished speaking, Jason stepped forward.

"This matter is more difficult than we thought," he said, "I would discuss it with my fellow ambassadors. It should not be impossible to regain what is rightly ours. As for this upstart, who styles himself 'Emperor of the Earth,' well, we shall see about that."

"As for the relation between Mur and Ecparu," he went on, "I think I can safely say that they will remain friendly, provided that you do what lies in your power to assist us in the recovery of the cloak.

"We shall be pleased to discuss possible plans with your majesty in the near future. May we therefore extend to you an invitation to confer with us on our vessel, the *Arcgu,* on the morning of the third day from now?"

Jason, while desirous of cementing friendly relations, was a Lemurian through and through and, as such, he continued to hold the reins and to arrange the conferences to suit himself. He knew also that a definite assumption of supremacy was the one attitude that would impress these people.

During the next two days, unofficial visits were paid and returned. A public holiday was proclaimed, and games, trials of skill, dances and banquetings were the order of the day.

In order to satisfy the curiosity of the old High Priest, with whom they had struck up a great friendship, as well as to impress the Ecparians with the power of Mur, Jason set up a target made out of an old boat. This he towed out on the lake to a point about a mile from the ship. Then, with a single discharge from his big gun, he wiped it out of existence.

The effect on the people was all that he could desired. From that time the Lemurians were reverenced almost as gods.

THE conferences revealed the fact that the hilly country of Kulthak was extremely short of salt—a remarkable condition for this continent—and so the men of that nation made periodic raids on Ecparu for the purpose of obtaining their needed supplies.

In mechanical contrivances they were somewhat ahead of the Ecparians, although, like them, they were ignorant of explosives.

Their most dangerous weapons were two huge mechanical carriages, from which they sprayed out a suffocating and somewhat inflammable gas. This gas, as far as could be discovered, emerged from the ground under the temple of their god, and was stored in containers for use in killing off their enemies.*

These cars proceeded only at a slow rate of speed and, as a rule, did not inflict many casualties. They did, however, ensure a clear passage for the enemy in their raids.

The fighting men who accompanied them were armed, like the Ecparians, with powerful slings and blow-guns. Apparently the two races were about equally balanced in fighting ability.

Their numbers were considerable. It was estimated that Kulthak could put into the field an army of about a hundred and twenty thousand men against Ecparu's ninety thousand.

By the time Jason had gathered all this information, as well as a general idea of the topography of the two countries, the afternoon was well advanced. The conference was, therefore adjourned for a further two days.

That evening the Lemurians attended a feast and ball in the royal palace. When they landed from their boat, whom should they find in command of the escort but the guard who had befriended the three spies.

As he recognized his three friends, his face turned a sickly white, but, disciplined soldier as he was, he did not move a muscle.

A whispered explanation acquainted Jason with the situation. He thereupon beckoned the officer to him and, holding out his hand in greeting, said to him quietly, "My friend, we of Mur owe you our thanks for your kindness to three of our number. Have no fear that any act of yours has brought evil on your country. We are here as friends and we hope that, before we leave, with our help, Ecparu will have inflicted on her enemies such punishment as they deserve.

"Rest assured that your little breach of discipline shall never be known to your commanders."

Greatly relieved, the officer returned to his troop. Later on, Jason requested that he be attached to the Lemurian company as Royal Messenger, a request that gained for him considerably accelerated promotion.

Plans for the expedition were completed swiftly and secretly. The army was quietly concentrated, as near as possible to the Kulthak border, ready for a surprise attack.

Jason spent many days with his friends working out a plan by which they could overcome the menace of the poisonous gases. As finally adopted, the plan was this. The engines of the *Arcgu,* when submerged, were driven by compressed air, which was pumped into tanks during such times as she was on the surface.

Fifty small tanks were constructed and filled with air at the highest possible pressure. Each man carried one of these tanks strapped to his back. From the tank a delivery tube, controlled by a valve, led to a mask which covered the nose and mouth of the wearer. The supply of air would last about three hours.

The raids of the Kulthaks were always made by way of a narrow pass in the mountains. This pass, the only way into Kulthak, was almost impregnable to attack, so it was decided to lure the hill men into making a big raid into Ecparu.

Accordingly a large quantity of salt was collected in the storages. The guard on the frontier was doubled, and preparations were made as though for defence against an expected raid.

A couple of scouts were instructed to approach the pass closely and, apparently carelessly, allow themselves to be captured, and give the enemy information concerning the salt.

Meanwhile, the main army, together with the Lemurian detachment, was concealed along the probable route of the attack. The Kulthak army was to be allowed to proceed well into Ecparu before meeting any very great opposition, so that they could be completely surrounded.

The plan worked exactly as designed. Some twenty days after the capture of the scouts, a large army was reported debouching from the pass. Apparently overcoming a feeble resistance, the invaders marched steadily forward into the heart of Ecparu for four days.

Then they got the surprise of their lives!

At dawn on the fifth day, from all sides there came the whistling of slung stones and the hum of blow-gun darts.

Rapidly the Kulthaks sprang to arms and moved to the attack, the huge gas carriers well in the van. What was their surprise, however, to find their cars surrounded by masked men, who seemed entirely indifferent to the gases.

Their surprise was soon turned into dismay when, from small hand weapons, came thunderous reports, and a stream of sharp steel missiles, driven with tremendous force and speed, pierced their bodies and their tanks.

---

* From the description it appears to have consisted of carbon dioxide, mixed with a percentage of the deadly carbon monoxide—forming an odorless, yet suffocating natural gas.

The gas carriers' crew were soon shot down. The escaping gas, spreading outward from the punctured tanks, caught the Kulthak army and, before they could realize what had happened, hundreds lay dying on the ground.

The Ecparian troops held back, out of range of the gas, and waited. The Lemurians seemed to bear charmed lives. Only two of them were struck and these not badly. Several times their enemies rushed forward to destroy them, only to fall victims to their own gases.

Meanwhile, a force of five thousand Ecparians had made its way over the mountains, and while a small detachment made a feint attack on the mouth of the pass, this little army fell on the defenders from the steep sides of the gorge itself. Long before the gases had become dispersed from around the main armies, the pass was captured.

The fighting was not yet over, however. Within a short time the gases had become dissipated, and then the real battle began.

For three days and nights it raged. The raiders fought desperately for their lives, but, cut off as they were, they were eventually forced into surrender, after a loss of nearly eight thousand men.

Neither, on the other hand, were those at the pass having everything their own way. Reinforcements from Kulthak were rushed to the defence. Ecparu had won the pass, but that was all. They could get no further.

For eight days of terrible fighting they held their ground. Then their main body reached them, and an army of fifty thousand Ecparians swept forward into Kulthak.

WITHIN ten days the war was over. Kulthak, facing annihilation, sued for peace. An armistice was granted and the king ordered to come at once to Jason's headquarters, bringing with him the sacred cloak.

Having no alternative, he came, prepared for almost any fate.

On his arrival, he surrendered his sword to Jason, who accepted it in the name of Mur and Ecparu. Then, to the surprise of the vanquished king, Jason returned it.

"King of Kulthak," came the slow, impressive words of the conqueror, "we accept your surrender. Your arrogance and haughty assumption of power have at last brought your land to ruin and utter defeat. You have learned that treachery and deceit cannot forever flourish, and that those who indulge in such things must eventually pay the price of their folly.

"Listen now to our terms, dictated by the allied empires of Mur and Ecparu:

> You will acknowledge the All Serene and All Wise, the Emperor of Mur, to be the Supreme Ruler over the Earth, subject only to the Holy Gods themselves.
>
> You will acknowledge the Emperor of Ecparu to be the Ruler of the continent of which Ecparu and Kulthak form parts.
>
> You will acknowledge your state of Kulthak to be henceforth a vassal state of Ecparu until such time as you are deemed fit to become an independent nation again.
>
> You will make payment to Ecparu for the whole cost of this war, and in addition you will compensate Ecparu for the losses sustained by that nation in former raids. We, of Mur, will adjudge the amounts to be paid and the terms of payment, and we guarantee that you will be fairly treated in this matter.
>
> You will return to the temple at Takana the sacred vessels and emblems which you have stolen, replacing with exact duplicates, so far as may be possible, such as may have been damaged or destroyed.
>
> You will conclude a trade treaty with Ecparu, and also with Mur if she wishes it, by which freedom and protection of commerce is assured, and by which, although you do not deserve such consideration, you shall be guaranteed a plentiful supply of salt at a reasonable price.
>
> Your independence shall be restored to you when you have shown that you are to be trusted among the nations of the world as a free and equal state.
>
> Until such time as we see fit to grant this independence, your army will be disbanded, and you will house and support in proper style an Ecparian army of occupation, not exceeding five thousand men in all. This army shall be stationed in any part or parts of your land as the commander, or the Emperor of Ecparu, shall see fit.
>
> Finally you yourself will accompany us to Takana to do homage to the Emperor of Ecparu after which you will accompany us of Mur to the city of Rapani to do homage to the All Serene himself.

"If you accept these terms, your sovereignty will be restored to you immediately and you shall accompany us, not as a prisoner of war, but in the state and circumstance of a Royal Vassal. Your safe return to your own country will be guaranteed by Mur.

"If you refuse our terms, you will be given one full day in which to return to your capital, after which the war will be resumed until your nation is utterely wiped out."

"We accept your terms, O, Prince of Mur," responded the Kulthak king after a short silence," for two reasons. Firstly, because we have no alternative, and secondly, because those terms are not only just, but generous. Your guarantee of a sufficient supply of salt will also remove the cause for attacking Ecparu."

THE peace treaty was signed immediately by the King of Kulthak, Jason, and one of the Princes of Ecparu. A few days were given for the vassal monarch to prepare for his long journey, and then the Ecparian army, leaving only the garrison, commenced its triumphal march back to Takana.

Although the war had lasted such a short time, the losses were great. Kulthak had lost nearly sixteen thousand killed and as many wounded, while Ecparu had suffered nearly as badly.

In spite of this, there was great rejoicing, now that the raids were stopped for all time, and Ecparu had been proclaimed supreme on the continent.

From full moon to full moon the feasting continued. The Lemurians had the time of their lives. Two of them, having won the hearts of Ecparian maidens, were so reluctant to leave the country that Jason gave them commissions as "Resident Ambassador to the Court of

Ecparu and Takana." There is no doubt that several of the best were planning to return to Takana after the conclusion of their mission.

Now that the Sacred Cloak was again in the possession of the Lemurians, there was no further obstacle to the alliance, the terms of which were settled to the full satisfaction of all parties.

The Sacred Cloak itself was carefully sealed in a special case and taken with great pomp and ceremony on board the *Arcgu*.

Day after day the old High Priest came on board the vessel, and at each visit he pestered Jason to let him into the secret of their method of entry.

Since the treaty included a clause to the effect that the way into the sacred lake should not be interfered with, there was no reason why the secret should be kept any longer. Jason, however, could not resist teasing the old man, whose arguments and importunities were a source of continual amusement to the Lemurians.

At length, one day, when both king and priest were present, Jason suggested that the former should be initiated into the mystery. At this the High Priest waxed so eloquent and brought forward so many arguments in favor of *his* inclusion in the initiation, that the Lemurians were hard put to it to keep their faces straight.

For a while Jason listened in solemn silence, then he turned to the king with a wink and said, "Majesty, if it will please you to be on board the *Arcgu* an hour after sunrise tomorrow, we shall be glad to divulge our secret to you. Since our vessel is not large, we must unfortunately limit the party to a very small number. We therefore suggest that the following persons may wish to accompany you: Her Majesty the Empress, the Crown Prince and Princess, the Chief Councillor, and——" he paused. The old priest was now fairly dancing with suspense and excitement. The word "and" had implied that only one more was to be included.

As if extremely doubtful of the propriety of his action, Jason turned to the old man.

"In wonder, would your Holiness so far condescend to lay aside your sanctity as to consider joining the party?"

With a bound and a "whoop" the old priest sprang at Jason and embraced him violently.

"My boy," he chortled, "I *knew* you wouldn't disappoint an old man. My sanctity can go to——"

"Oh! Your Holiness," interrupted Jason in a shocked voice. "Such expressions must never pass *your* lips. What *would* the younger priests think!"

Strangely enough, in spite of the obvious shape of the vessel, no one, except the emperor himself, seemed to have had any suspicion of the truth. Startled, and perhaps a little apprehensive, expressions were seen on the faces of the visitors, when the hatches were sealed over their heads.

At Jason's request, they all assembled in the control room, from which strong windows gave a view forward.

As the boat began to submerge, the looks of anxiety became more noticeable and, finally, the old priest, who had by this time lost all his enthusiasm for the trip, begged to be put ashore "before we all drown."

"You are quite safe," Jason reassured him. "What if we *do* drown? Are not these sacred waters? Is it not your earnest desire to enter the world of the gods?"

At this the old man became absolutely panic stricken. Evidently he was *not* yet prepared to enter the realm of the blessed. When, however, he found that no water entered, he regained his composure and soon his eternal questionings began again.

The wonder of the visitors was beyond expression. Once under water they realized just how the entrance had been effected, and they settled down to a complete enjoyment of the trip. Meanwhile, those on shore were filled with alarm. Apparently the ship had gone down with all her crew, as well as with the highest dignitaries of their own land. Certain of the princes had, however, been warned not to be disturbed by any strange happenings, and these few leaders were able, after a time, to reassure the people—at any rate to some extent.

The surprise of the passengers on entering the great cave was almost greater than that which they felt when they first submerged. Jason flashed searchlights, in various combinations of colors, over the walls and roof of the cavern, the effect being that of a veritable magician's cave of jewels.

When they reached the open ocean, they unsealed the hatches and the whole party went out on to the deck. The ship was now put through her paces, and a sham battle was staged for the visitors' benefit.

Then they submerged into deep water and, for the first time, the Ecparians saw the marvels of deep-sea life.

A little before sunset they returned to the lake, and rose in full sight of the anxiously waiting multitudes.

At the evening "Ceremony of Praise" the old High Priest could scarcely perform his office for excitement and importance. Indeed, once, when he came to the sentence "Lord of the World who dwelleth in the Sun," he so far forget himself as to paraphrase it into "Lord of the World who dwelleth *under the water*" much to the amusement of the younger members of the congregation.

The round of feasting and rejoicing over, the voyagers began to prepare for their homeward journey. In place of the two who were to remain behind, they took with them two princes of Ecparu as "Resident Ambassadors to the Court of Rapani." In addition there was, of course, the Kulthak King and his suite—necessarily a very limited one.

At the last moment the Crown Prince approached Jason and requested that he might be permitted to accompany him on a ceremonial visit to Mur. The Emperor having given his authorization, this was arranged and both Prince and Princess joined the voyagers.

The populace turned out *en masse* to witness the departure. The lake was strewn with flowers thrown by the enthusiastic crowds. The High Priest pronounced the "Benediction on the Departing" and then came down to the landing stage for a final farewell. As he grasped Jason's hand, he whispered, "Can't smuggle me on board, can you?"

"No," whispered Jason in reply, "Might *drown* you!"

As the *Arcgu* slowly submerged, the people chanted the "Royal Anthem of Praise," and the hearts of the Lemurians were very full as they sank beneath the waters.

The homeward voyage was made without any attempt at concealment. On the third day out they sighted a Lemurian warship and signalled her to them. The surprise of the sailors was comical, as were also the attempts on the part of the officers to appear totally unconcerned.

(*Continued on page* 369)

Though he could look down through thousands of feet of dizzy space, he did not fall. Instead, he was walking towards the Taurog and those menacing weapons—walking apparently on nothing.

The Resistant Ray

By Francis Flagg

Author of "The Machine Man of Ardathia," "The Master Ants," etc.

IT would almost seem as though we might be amply protected—if knowledge of possible dangers is a protection—against any kind of inimical overture or impending invasion from another planet, by the time we have attained the reality of interplanetary travel—assuming, of course, that all the obstacles to such travel will be overcome and conquered in time. Our well-known author gives us yet another idea and asks us, in most vivid manner, to hearken to his warning.

Illustrated by MOREY

RAGNAR was sitting on a boulder outside his adobe lodge, when he saw Doctor Bush. Several mornings he had observed him lumbering by, his thin figure stooped, his lips moving as if he conversed with himself. But this was the first morning he stopped and spoke.

"They tell me, young man, you own the place here?"

Ragnar nodded pleasantly.

"All this hillside belongs to me."

"Then I suppose I'm trespassing. It doesn't, I trust, incommode you?"

Ragnar suppressed an inclination to smile at the stilted phrasing.

"Not at all. So long as you don't yodel, stand under my window and recite, or heave rocks through it, you're welcome to trespass all you want to."

"Thanks," said the Doctor stiffly, walking on.

But the next morning he paused to exchange a few remarks, and within a week was even tempted to occupy the boulder next to that of Ragnar. Ragnar thought him a queer but likable character. He never suspected that Doctor Bush was a world-famous, if somewhat eccentric, physicist; nor did the Doctor have the least suspicion as to the identity of the man with whom he talked. Ragnar found it convenient to be able to retire to this secluded neighborhood in the Catalinas (he had purchased his property through an agent five years before) for the season's shooting of quail and white-wing doves. The local people knew him under an assumed name; and while lithely built, possessed of good looks and really abnormal strength, there was nothing, to the casual eye, to distinguish him from a hundred other men. In his profession this was an asset. He sedulously cultivated the art of being inconspicuous.

"Him?" said the local postmaster and storekeeper, speaking of Ragnar. "Oh, he's an eastern chap, comes here every fall for the huntin'. Name of Brown. Writes for magazines. Yeah, I know all about him; lives in New York."

As a matter of fact, Ragnar did write occasional articles and stories for the magazines, and under the name of Brown. He was nothing, if not thorough, in creating a part. It was his private conviction that if he took the leisure to perfect his crudities, he would make a great writer—a conviction the editors did not quite share.

"So you write stories," said the Doctor with a sniff one morning. "What kind of stories?"

"Adventure stories," said Ragnar modestly. "Here's a magazine with one of my latest in it."

He showed a periodical.

"Bah!" said the Doctor. "Bunk! Not your writing," he finished hastily, since Ragnar flushed; "that may be all right. I mean the idea of your writing about adventure, while I live it."

The idea of the short-sighted, stooped Doctor living adventure made Ragnar smile.

"Laugh, my boy," said the Doctor tolerantly, "but there are adventures within the laboratory of which you shooters of deer and quail never dream." Behind the heavy lenses his eyes shone. "Imagine if you can the thrill of traveling into the atom!"

"Am I to understand that you have?"

"Oh, no! Not yet," The Doctor hesitated. A queer little man, mused Ragnar indulgently. Slightly touched, of course, like all impractical dreamers.

"But I plan to do so some day. Just now I lack the money to carry on my experiments. That is why," he said slowly, "I've undertaken this other job. Not that I believe in war, but they pay all expenses; and if I'm successful, I'm to get five million—five million."

"Eh!" said Ragnar.

"I shouldn't have said a word about it," muttered the

Doctor, anxiously. "It's all a secret, you know—government secret."

Government secret! Ragnar started.

"Did you say government secret?"

"Yes; it's for the government I'm working; but you mustn't repeat a thing I've said. Promise you won't."

"I promise," said Ragnar, but he looked after the Doctor's retreating back rather thoughtfully. Of course the old man was probably laboring under a delusion, still. . . .

Late that afternoon, after shooting a few quail, he approached the roomy house the Doctor occupied at the end of the deserted Linda Vista road. It was the first time he had gone near it this season. A newly erected heavy mesh wire fence surrounded the ten acres of flat and reasonably clear land comprising the estate. He whistled softly to himself, for under a thatched roof of yucca and bear grass stood a try-sky speeder of most modern make and design. Of course, it might belong to the Doctor, though that seemed improbable. Still whistling softly he skirted the fence to the front of the house and rang the doorbell. The girl who answered his ring was breath-takingly lovely. Her hair was tawny, not blond, not red, an indescribable shade, waving naturally, and she had blue eyes, with freckles on her nose. To the rear of the girl stood a surly man clad in a rumpled blue suit, gross, puffy of jowls, yet powerful looking for all that. His greenish eyes, surprisingly large and heavy-lidded, probed Ragnar's face.

"Sorry," he said in a husky voice, "but the Doctor's busy, can't see any visitors today."

The girl had been crying; her eyes were red.

"Who shall I tell my father called to see him?" she asked.

"Brown," said Ragnar carelessly. "My land lies over the ridge there. I'm your father's nearest neighbor."

"Now who in the devil," he muttered to himself as he trudged away, "could that fellow be?"

In the hallway of the house Ragnar had quitted, the puffy-jowled man with the green eyes faced the girl.

"I hope," he said in a husky whisper, "that your good father has not been indiscreet. That would be too bad, too bad indeed."

"My father," said the girl quietly, "talks to no one. He mentioned meeting this man on his morning walks."

"So." His heavy-lidded eyes swept her lingeringly. the look was amorous, almost a caress. She shrank under it. The man smiled, a smile not good to see, and turned away. In the laboratory, the Doctor looked up with a start.

"Is that you, Mr. Miller?"

"Yes," said the other with a perfunctory handshake. "I arrived only a few minutes ago. How are things coming along?"

"Splendidly," glowed the Doctor. "There is progress, yes. In fact I might say. . . ." He broke off, laughed exultantly. "Look; do you see that instrument there?"

The base of it was a square box of blued steel, one side of which rose some five feet in the air. This side was studded with what appeared to be round disks of brass. The top of the box, jutting at right angles to the brass-studded side and giving the whole machine the appearance of a large chair or desk, was smooth, and bare of anything save two graduated dials. Stepping to this control board, the Doctor busied himself turning them. Somewhere in the depths of the box, a motor began to purr, the brass studs turned red-hot, then white. Apparently nothing else happened, but he called out to the heavy-lidded man, "Will you please walk towards me."

The latter obeyed. Midway in his stride he came to an abrupt stop. "God!" he exclaimed in his husky whisper, "I can't go any further."

"No," cried the Doctor, "nor could a cannon-ball. You see I did not exaggerate. I told the Department then that I could build a wonderful war weapon from my initial discovery if time and expenses—and a sum for the invention—were allowed me. At first I was ignored; but later, through you. . . ."

"Yes, yes," said the heavy-lidded man, his green eyes sparkling, "this is marvelous; all we expected." Then abruptly: "Who is this neighbor of yours?"

"Neighbor?"

"The one you've been meeting on your walks?"

The Doctor flushed.

"Oh, you mean Brown. Owns the property the other side of the hill. New York man. Writes adventure stories. Comes here every season for the hunting."

"Haven't been telling him what you're working on?"

"No, I don't believe so."

"You don't believe!"

"Maybe I did say I was working on a process for the government."

"My God! Of all the damn dumb——"

"Nothing else though," interrupted the Doctor.

The puffy-jowled Mr. Miller's face turned turkey-red.

"Fool! When you were warned never to say a word."

The Doctor's stooped figure straightened with a jerk.

"Really, Mr. Miller, I resent your language."

The other growled an apology.

"I guess this Brown's all right. He'll probably never think twice of what you said. If you'll explain at length how this machine works, Doctor. . . ."

The Doctor obliged.

"As you see, everything is encased within metal; the machine is simple to operate. As for the plans, the data on which the invention is based, they are there," he gestured to a pile of blue-prints and note books. "You can turn them over to the Department engineers any time you wish now. Then," he said with a sigh of relief, "I'll get my check."

"Yes," said Mr. Miller with a peculiar smile, "you'll get your check."

THINKING of the beautiful girl, of the try-sky speeder under the thatched roof, of the puffy-jowled man and what the little Doctor had told him about working for the Government, Ragnar cooked his supper thoughtfully, ate with appetite, and washed the dishes. He never employed help. Usually, unless too tired or too late, he walked the mile and a half to the Mountain View Hotel and dined there. As he smoked a cigarette before turning in, he pondered the situation. The Government had its own laboratories, well equipped, guarded. It wouldn't be apt to commission a scientist to conduct physical experiments away off in the wilderness. He would have to inquire about that. The Doctor, of course, might be a bit off his base, but there was the try-sky speeder and the puffy-jowled man. Where had he seen his face before? Somewhere, he was sure of that. The next morning Ragnar was abroad early in the hills with his gun. Approaching the Doctor's house he noticed that the speeder was gone. Acting on impulse—he had intended going to the hotel instead and making some long-distance inquiries—he walked to the front entrance and rang the bell. The girl came to the door, looking lovelier than ever.

"I'm sorry," she said, "but father's still sleeping. He was up most of the night and . . ."

Again acting on impulse, Ragnar said: "Pardon me, Miss Bush, but I didn't call to see your father; I called to see you."

"Me?"

"Please don't be offended. Yesterday you looked as if you'd been crying, and frankly, I didn't like that fellow who practically ordered me off. Get me straight, Miss Bush; I'm not trying to butt into your affairs out of idle curiosity, but this is a lonely place and if you're in any trouble. . . ."

Her lips quivered.

"It's father, Mr. Brown." She hesitated, and then went on with a rush. "He's so naïve and childish, and Mr. Miller. . . ."

"Miller?"

"The man you saw yesterday. He, he . . ." her face flushed scarlet, "he bothers me with his attentions. I detest him. He claims to be a Government agent. . . ."

"Ah!"

"But I don't believe it. There's something queer about him. Once he came here with another fellow and I overheard them talking in a strange language—Martian it sounded like. Why should Government agents be talking in Martian, Mr. Brown?"

"I'm sure I don't know."

"I told father, but he only pooh-poohed the whole thing, warned me not to say anything to outsiders. Father is a dear, Mr. Brown, and a great man, but was it necessary for him to come here under an assumed name?"

Ragnar was surprised.

"Isn't Bush his name?" he asked, quickly.

"No, our name is Lasser. Father is Doctor John Lasser."

The famous Doctor John Lasser! Ragnar whistled softly. Why of course he had heard of him. Who hadn't? His name was internationally known. And anything Doctor John Lasser might be engaged in doing. . . .

"What is your father working at, Miss Lasser?" he questioned her again, eagerly.

"I do not know. He is secretive about it. But it's a weapon for warfare.

A weapon for warfare! The Martian language! Things clicked into place in Ragnar's mind. The great space cruiser, *Taurog* was making a tour of the solar system at this time, was now on earth. And Miller—the puffy-jowled Miller—he knew now of whom his face reminded him; it reminded him of. . . . With a low cry of excitement he surged to his feet, and in that moment stood transfixed by the drone of an airplane's engine. A glance through the open door showed him a long, rakish craft circling the grounds, diving for a landing.

"It is they," cried the girl. "Mr. Miller said he'd be back right away."

Ragnar grasped her arm tensely.

"I've no time to explain, Miss Lasser, but you must trust me. Where can I hide?"

"My bedroom," faltered the girl. "At the head of the stairs."

Ragnar took the steps two at a time. If Miller were what he suspected, he would never let him walk away unmolested. The thing to do was to remain concealed and be guided by circumstances. From behind lace curtains he watched the plane make a perfect landing. Four men clambered out. One of them stood beside the aircraft and the other three strode rapidly towards the house. The bulk of Miller was easily identifiable. In a few minutes his husky voice floated up the stairs.

"Damnation!" he stormed in Martian, which Ragnar, having made several trips between the planets, and studied for a time in South Taurog, understood perfectly, "Carry those things carefully."

Ragnar cursed under his breath. The Doctor's invention . . . and it must be one well worth while or these people would not be interested in it . . . was being spirited away and himself powerless to intervene.

He saw the Doctor come from his room in a trailing dressing-gown and disappear down the stairs. His high-pitched tones came to Ragnar's ears.

"Why, Mr. Miller," he expostulated, "you didn't say . . . that is, I didn't realize. . . ."

"Time to be moving," cried the other unceremoniously. "You're wanted at Washington, Doctor, where everything will be fixed up with you. If your daughter will get ready. . . ."

"I'm not going," said the girl flatly.

The puffy jowls shook with husky laughter.

"Oh, yes you are, my dear, if I have to carry you."

"Father," stormed the girl, "are you going to let this man speak to me like that?"

"No, Helen, of course not. You forget yourself Miller. If my daughter doesn't wish to accompany us. . . ."

No one heard Ragnar run softly down the steps. He cursed himself for not having understood the situation in time and arranged for assistance. Now he was one man against four armed and remorseless men. But he couldn't stand by and see harm come to the girl. Already he was thinking of her as something dear and precious. Besides, he would merely be Brown, a harmless neighbor, making a friendly call. That assumption on their part might carry him through, might deter Miller from bothering with the girl.

"Hello," he said, looking as if he had just entered by the front door, "I rapped, but nobody came. Hope I'm not intruding?"

His fowling-piece pointed forward, negligently covering the man called Miller, whose heavy-lidded green eyes literally shot sparks of fire. A charge of birdshot at such short range, thought Ragnar coldly, would blow a hole through his chest. Even as the thought occurred to him a roar filled the room, not of the fowling-piece but of a heavy automatic pistol. Struck by a thunderbolt he had never a chance to see, Ragnar swayed, buckled at the knees, and pitched forward on his face.

"Got him, Commander," said a gutteral voice in Martian, as a man stepped from the laboratory doorway with smoking weapon.

There was a moment of stunned silence; then the girl screamed hysterically, "Murderers! murderers! You've killed him, you murderers!" and sought to throw herself upon the prone body. But Miller swept her to him with one powerful arm and clapped a hand over her mouth.

"It's his own fault, the fool! To point at me with a gun like that. My men have their orders." He kicked the body brutally. "Is he dead, Kira?"

"Shot through the heart, sir. See," turning Ragnar over and indicating a dark spot on the left breast of his shirt. "I couldn't miss at that distance, sir."

"Serves him right," muttered Miller, "poking his nose where it wasn't wanted." And then as the clamor of the horrified Doctor broke on his ear, he shouted, "Silence that fool, someone! Yes, tie him up, gag him! And this wildcat, too! No, leave the body where it is. This is a lonely place. No one will find it for days. And it doesn't matter if it's discovered sooner." He laughed harshly. "Who will ever suspect us? The front door's locked? Good! Let us go."

RAGNAR came out of a void of blackness as a man comes out of ether. His head ached dully. There was a sore spot over his heart and when he moved a sharp pain darted through his chest and down his side. It was several moments before he realized what had happened. Shot, by God! he had been shot! He sat up with a groan, feverishly tearing open the bosom of his shirt; then at what he saw, laughed weakly. The metal plaque bearing his number, department symbol and credentials which he wore suspended from a fine chain round the neck and which had worked to one side, was heavily dented, cupped, and wedged in the rough cup was a chunk of lead. But for that metal plaque, it would have lodged in his heart. As it was, an area of chest was black and blue, a rib felt as if it might be broken, and there was the salt taste of blood in his mouth. But luck had saved him from death—the Ragnar luck. He staggered to his feet. The place was, as he had expected, empty. In the kitchen he soaked his aching head with water, found iodine in a cabinet over the sink and painted his bruises, drank a half-pot of cold coffee discovered on the oil-stove, and felt more able to think clearly. There was no time to lose. A glance at his watch showed he had been unconscious nearly an hour. Eleven o'clock. And the *Taurog* had been scheduled to pass over Tucson at ten. That meant that she had an hour's start now on her way to Los Angeles, and going like hell, if he knew anything of her commander, with Doctor Lasser and his daughter prisoners on board—and the Doctor's invention, the real stake for which the dash was being made.

Everything was so plain. Doctor Lasser had offered to perfect his invention for the International War Department of Earth; but the stupid bureaucrats of the Department had ignored his offer and a planted spy had informed the Martian government, which, afraid that the scientist's patriotism might cause him to reject an offer from an alien planet, had cozened him into believing his own Government had changed its mind and set him to work. The trip of the *Taurog* was scheduled to coincide with the completion of the Doctor's labors. No wonder Franz Josef—that head of an expatriate band, that disgruntled ruler had foresworn allegiance to Earth and taken service with the autocratic government of Mars—had refused to be interviewed or seen on the trip of the giant space-cruiser which was bearing him and his men as an embassy of good-will to the various capitals of Earth on behalf of Mars. For months he had been secretly in America, watching the Doctor's progress, awaiting the moment for the *Taurog* to come.

And the *Taurog* had picked him up! Ragnar's brain simmered. He must do something at once—but what?

Call Washington? But Washington would naturally be incredulous. He himself was supposed to be in Europe. Valuable time would be frittered away proving his identity, checking up on his story. Damn all red-tape! By that time the *Taurog* would be at sea, five hundred miles off the coast, her prisoners and the invention transferred to another space-ship lurking somewhere on the blue waters of the Pacific.

Wire direct to Los Angeles?

But who would believe such a bizarre tale by wire? Besides the authorities would hesitate to interfere with an air vessel which enjoyed diplomatic immunity and bore the goodwill of Mars to the world. A mistake could well prove costly and embarrassing. No, the naval authorities would never make a move unless the highest power commanded.

Ragnar groaned. The whole thing was up to him, one man. He, and he alone must stop the *Taurog*. A wild plan came to him in a flash. He was acting as he thought. Fortunately, the old Ford in the garage was in good running shape. Down the road he shot at a precarious speed. Twelve miles away was a flying field where the fast western mail express stopped for fifteen minutes at noon. Praying fervently that there would be no blow-outs, Ragnar drove like a demon. A tire popped with a report like a pistol. The car skidded dangerously. Five precious minutes to put on the spare. He ground his teeth. Helen Lasser was in the hands of the puffy-jowled beast. A deadly weapon of warfare was being filched from America. Faster, he drove, faster. Bang! The car lurched, slowed, went into the ditch. Damn the luck! No spare to take the place of the flat, nothing to mend it with, even if he had the time. Despairingly he drove the Ford on, but at reduced speed, cursing the lonely road, the lack of houses. At this rate he would never make the field in time, would never. . . . But what was that? A Reo truck standing beside the road with engine running, loaded down with farm produce; a small adobe house back from the road a hundred yards, two men lolling in its shade. No time to talk, to barter for its use. Later he could pay them what they asked. To jump from the Ford into the cab of the Reo was a matter of seconds. As the heavy truck leaped ahead he heard the two men shouting. Then there was the throb of the engine and the whistle of the wind in his ears. Mile after mile vanished behind him. Now he could see the flying field and the big mail-plane like a white-winged bird. The pilot was in the cockpit, leaning out, ready for the take-off, a mechanic swinging the propeller. Through the open gate Ragnar swung, across the smooth expanse of field, the heavy truck-wheels plowing up the earth and clouds of dust.

"Wait!" he shouted, "wait!" though no one could possibly hear his words. But the mechanic paused in his task to watch the careening truck, and people drew back in alarm as it swept recklessly alongside the mail-plane and came to an abrupt stop. Fifteen minutes past twelve, and a disheveled man jumped from the cab of the Reo and into the cockpit alongside the pilot.

"Hey! what the devil!" cried that worthy.

"Government business!" shouted Ragnar crisply. He showed his dented plaque.

"What's that?"

"Can't you see? Secret Service badge."

"Yeah! Looks phoney to me."

A man was pushing forward from the airdrome office, a square-jawed individual with a rifle in his hands. Ragnar gave over trying to explain. The small automatic carried in a holster under his arm-pit came out with a jerk and bored into the side of the pilot.

"Listen! I'm O. K., see; but if you don't give the signal for the take-off, it will be just too bad for you, too bad!"

The pilot's face was a fighting one, but he decided not to take a chance.

"All right," he cried to the mechanic, "turn her over!" and to the approaching guard, "this gentleman's all right —Department man."

Down the field they roared, the powerful machine zooming, lifting. Now they were up.

"Give 'er the gun!" yelled Ragnar.

He tried to explain to the pilot that he wasn't a madman or a mail-robber, but he had little success. That icy-eyed young man merely itched for an opportunity to get the drop on his unwanted passenger. Ragnar's face was grim.

"No funny tricks," he warned.

The motor roared, the wind whistled by. Their speed was twice that of the *Taurog,* down here where there was atmospheric friction. At the worst he should come up with her twenty miles off the coast. Before reaching Los Angeles he nudged the pilot with his gun. He couldn't go into action with him to hamper his movements.

"I see you're wearing your emergency parachute. Well, here's where we part company. Overboard you go!"

The glint in his gray eyes was compelling.

"You'll get life for this," warned the pilot.

Ragnar watched him falling through space, saw the great circle of silk snap open above him. Rough on the kid to ditch him like that.

From its place he took a second parachute, small, compact, and bound it on. It was just as well to be prepared. Flying this type of plane was no novelty to him. The air-coolled machine-gun and disintegrator ray with which all mail planes were equipped were also familiar.

Over Los Angeles he roared at an altitude of five thousand feet. With the pilot's powerful binoculars he swept the horizon. No sign of the *Taurog.* The sea raced in to meet him. Smoke of tramps and tugs were rising smudges against a cobalt blue. Far off over the Catalina Islands a bank of gray clouds hung low. The space-cruiser must be hidden by that bank. Recklessly he gave his craft the gun. Through the clouds she tore, over them. Yes, there was the *Taurog,* a vast, cigar-shaped monster, floating easily between a purple sea and a sapphire sky, sun glinting on burnished metal.

His plan was simple. Possessing greater speed, he would circle the cruiser, give her a taste of the disintegrator ray, with which all mail planes were equipped for use in an emergency, force her down. There was no danger, for on such a calm sea the *Taurog* could float for hours. Anyway, help would speedily come, the Doctor and his daughter would be rescued, he would be vindicated and the enemy foiled.

A wild plan, yes, but the only one Ragnar could devise.

Perhaps it might have succeeded if the wild speed of the pursuing plane hadn't aroused the suspicions of one of the *Taurog's* officers. He levelled his glasses at the approaching craft, caught the set face of her pilot in the circle of his lenses, glimpsed the disintegrator ray gun swung outward for action.

"My God!" he exclaimed.

Ragnar fired, lifted, went over the *Taurog* at tremendous speed, banked, came back, but the cruiser too had her skill at maneuvering. She turned, as if on a pivot, darted off at an angle, and the thin beam of dazzling light missed her by yards. Again he banked, turned, his face a grim-set mask. Not again would he miss. Now, now. . . . But even as his hand manipulated the control, it happened. With a thunderous crash, a sickening shock, the plane catapulted against an invisible wall, catapulted and bounded back with splintered propeller, shattered engine. There was a kaleidoscopic moment when the world turned over, when Ragner felt himself plunging, falling; then came a dislocating jerk, and miraculously enough the wrecked plane was suspended between the sea and sky, one wing snapped off, half-turned over, seemingly upheld by nothing but thin air. Ragnar stared, astounded Thirty yards away the *Taurog* floated, a section of open deck and cat-walks lined with angry faces. A puffy-jowled man with heavy-lidded green eyes was glaring at him. Rifles, pistol covered him menacingly.

"Damn you!" roared a husky voice, "come over here, quick, before we riddle your carcass with lead!"

They were commanding him to cross empty space. But that was impossible!

"Get a move on!" roared the voice.

Ragnar swung a leg out of the cockpit. Anyway the flat, inconspicuous parachute was on his back. If they meant him to plunge to his death, they would be disappointed. But incredibly enough his feet found firm footing underneath them. Though he could look down through thousands of feet of dizzy space, he did not fall. Instead, he was walking towards the *Taurog* and those menacing weapons walking apparently on nothing.

The thing was impossible! He wondered if all this weren't a dream. But the hands dragging him aboard the *Taurog* were real, the hard-faced men in dark uniforms who confronted him were no figments of the imagination. A wave of despair swept over him as he realized he had failed in his desperate attempt to force the cruiser down.

"God!" exclaimed a voice, "it's the swine we left dead in the Doctor's house!"

The green eyes of the puffy-jowled man narrowed.

"So it is. But why should he follow us, this Brown, this sportsman?"

An under-officer stepped forward and saluted smartly. "If it please the Commander, I recognize the prisoner. His name is not Brown."

"NOT Brown?"

"No. You will recollect that I am a member of the intelligence corps; that I have seen pictures, photographs, been given descriptions. This man's name is Ragnar."

"What!" roared the puffy-jowled man. "Not Ragnar of the American section of the Interplanetary secret service: Ragnar who upset our plans in 1945, caused their defeat, the death of our agents?"

"Yes," said Ragnar coolly, perceiving further disguise impossible. "The same, Mr. Miller—pardon me, Prince

Franz Josef! It seems," he said conversationally, "that we both have a penchant for names other than our own."

Franz Josef's lips curled back from his teeth.

"And you were spying on me all the time?"

Ragnar shook his head regretfully.

"Unfortunately, no; otherwise the situation would not be what it is now. Only this morning I recognized you, understood what you planned."

An evil smile broke over the puffy-jowled face.

"To have you in my power—the nemesis of my planet—God, that is good! But first let me tell you—let the knowledge embitter your last moments—Mars will yet put a conqueror's hell on the face of your own insignificant Earth."

Ragnar laughed scornfully, though his throat was dry, his heart like lead.

"Laugh," cried the husky voice, "but you saw the weapon we shall use in action—the invention of your Doctor Lasser, who thought he was perfecting it for your own war department. That *was* a joke! You wrecked your plane against the resistant rays he discovered. The same rays directed beneath your plane held it up. You walked across an invisible floor of resistant rays from your craft to the *Taurog*. Ha, you begin to understand. Our soldiers can shoot from behind such rays in perfect safety, for they are not impervious save to bodies traveling against their line of projection. From the air we shall wipe out armies, cities, protected ourselves from gun-fire, poison gas, explosive shells, stamping them flat. First France, England, and then. . . ." he waved a fateful hand.

Ragnar schooled his features to express nothing but disdain, but within he felt cornered, lost. To think of such a weapon in the hands of this madman, in the hands of a ruthless enemy eager for revenge, for conquest of the solar system! To think that he, whose boast it was he had always succeeded, had blundered at last, had failed his country in its most crucial moment of need! He upbraided himself for his folly. Of course he should have called Washington, have wired the coast. But he had followed his own intuition instead, had trusted everything to his proverbial luck—and that intuition, that luck had betrayed, had deserted him at last.

And there was Helen—Helen Lasser—in the power of this brute. The thought was maddening. He knew Franz Josef's reputation where women were concerned. There must be some way out, there must be! The malignant green eyes caught the swift glance with which he circled the deck. "Ha, you are thinking of escape. But there is no escape for you. None. You are about to die. And in a way that will again demonstrate your countryman's invention. Seize him," he commanded the guards.

It was useless to resist. Ragnar was dragged along the deck into the interior of the cruiser. There was a narrow passageway, a large cabin, a smaller one. Franz Josef gave commands in low husky tones. Soon a strange machine over five feet high was wheeled into the smaller cabin. There was a low square box, a tall metal shield studded with brass disks. The surface of the box was a control board bearing graduated dials and cogs. An operator seated himself at this control board. The low hum of a motor filled the cabin. A minute passed. Then Franz Josef straightened and with a wave of the hand dismissed all but the operator from the room. He looked at Ragnar with an evil grin.

"This machine generates Doctor Lasser's resistant rays—with a few of our own additions. I now beg to inform you that the rays are being directed towards yourself. They form an invisible wall exactly the width of this cabin. Slowly but surely the length of the rays is increasing. I have told the operator to take his time; but inevitably the moment will come when the wall of rays will meet the wall of metal behind you, and then. . . ."

"Good God!" breathed Ragnar, looking the horror he could not suppress.

"You fiend!" he cried, and whipping out the small automatic still in the holster under his arm, fired point blank at the gloating, puffy-jowled face. But three feet in front of it the bullet mushroomed and fell to the floor. Ragnar's own impulsive leap was brought to an abrupt stop against an icy-cold surface of unyielding hardness. Franz Josef laughed raspingly.

"So that unnerves you, eh? I wish I could stay and see you squirming—like a rat in a trap. But some sights are too unpleasant. Imagine it, smeared to a jelly between two walls!"

He went away, then, closing the door after him, leaving Ragnar alone in the room with the silent operator who, hidden from sight behind the metal shield, uttered never a word.

RAGNAR fought desperately for coolness. It was impossible that he should perish so hideously. Hadn't he escaped from a fortress on Jupiter—outwitted the torture chamber of Betula, the far-famed monstrosity of Venus? There must be a way out of this present predicament—there must be. But as inexorable as fate, the invisible wall of rays advanced, driving him back step by step. Against its smooth surface he pressed with hands that ran this way and that. Unconsciously panting for breath—as if already the wind were being crushed from his lungs—he darted the breadth of his narrowing prison, seeking an avenue of escape, but seemingly there was none.

With an effort of will he compelled himself to stand still, to think calmly. It was a theory of his that there was a way out of any difficulty, if only one could see it. He mustn't break—that would be his finish—he wouldn't beg; and he'd be damned if he'd give them the satisfaction of hearing him squeal.

But still, to be crushed to death!

He raised a hand to wipe the perspiration from his brow and for a moment stared stupidly at the automatic clutched in it.

There was a way out!

At any moment he could shoot himself!

But with all his healthy nature he recoiled from the thought of self-destruction. Not until the very last second only would he entertain the idea. But the last second was almost upon him. Three feet of space left; two. He raised the automatic to his head. God! was this to be his inglorious end? He cast his eyes upward as if imploring divine intervention and in the act of doing so was smitten by an idea, like a bolt from the blue. The ceiling! The rays! The latter filled the width of the room from wall to wall, but did they reach as exactly from floor to roof? To think was to act. The roof was five feet above his head. Up, he climbed, up, his legs, his arms, his body braced for leverage against opposing walls steadily closing. God! What if there was no space between the rays and the ceiling? What if. . . .

But there was such a space! His fingers slid over the top of the advancing wall and his body followed. But just in time! The reaction from what had seemed certain death left him for a moment unstrung and trembling. Yet he wasn't dead. His heart sang. It was with an effort he restrained an exultant shout. Luck was with him again, the Ragnar luck. The top of the rays declined smoothly towards the metal shield. Noiselessly he squirmed forward until poised over the unsuspecting operator's head. On the upper thickness of the metal shield was a short rod of steel loose under a tentative hand. He drew it from the casting into which it sank, unaware of the fact that his doing so rendered the control board useless.

A deadly weapon. Up he swung it, up, and down upon the bowed head below. He hated to do it but his life was at stake, the safety of the woman he loved, of America, of the world—possibly the whole solar system, and it was no time to be squeamish. Without a groan, the operator collapsed. Ragnar leaped to the floor and shook himself together. He was the old Ragnar again, optimistic, dynamic. There was no weapon on the operator, but his own automatic was minus only a single bullet. For a moment he had a wild idea of using the resistant ray machine to conquer his enemies, but found it immovably anchored to the spot by the power of the rays it was shooting forth. Nor could he shut them off by a manipulation of the dials and cogs. None would turn for him, for some reason. So, every sense on the alert, he stole to the door, pushed it open a crack, and peered into the passageway beyond. It was dimly lighted, deserted.

His situation was still desperate. He was one man against many aboard the *Taurog*. Nor did he have any plan of action save the vague one of finding the whereabouts of the Doctor and his daughter and of foiling Franz Josef. In whatever he did he must be guided by circumstances.

Bar in hand he crept along the passageway. Behind him, from the room he had quitted, came an ominous creaking and straining, but he was too intent on what lay ahead to give it much attention. To the left was the large cabin he had been dragged through. He heard voices shouting, the sound of approaching feet, and darted to the right. A man, an ordinary mechanic by his looks, started back at sight of him, with lips parted to shout. Ragnar batted him down with the bar of steel. Someone was coming. Through a half-open door he hauled the body of his victim and hastily swung shut the door, throwing into place a steel bolt. Whoever it was went unsuspectingly by.

The cabin in which he found himself was large, and comfortably, even luxuriously furnished. A heavy rug was on the floor. A shelf of books stood against one wall. There were upholstered seats in rich brown leather, pictures, mirrors, a table covered with magazines, a sideboard on which stood glasses, decanters, a box of cigars. Undoubtedly this was the Commander's lounging room, a part of his suite. Within a curtained recess was a wide bunk. Another door gave entrance to a dressing-room and bath. Beyond a narrow passage was a cabin from which came voices. Regretting the fact that he had dropped the steel bar when dragging the mechanic's body into the first cabin, yet not caring to risk the retrieving of it, Ragnar drew his automatic and silently advanced. The door, from beyond which came the sound of voices, was ajar, and he could see as well as hear. His heart leaped into his throat. Standing back of a chair was Helen Lasser, while in the foreground Franz Josef glowered, his back to the door. The girl's tawny hair was rumpled, her lovely face pale, but hatred and defiance gleamed from her blue eyes.

"You villain," she was saying, "I hate you, hate you!"

Franz Joseph laughed, his husky laugh.

"Hate away, my beauty," he said in perfect English. "It will be a pleasure to tame your pride, chasten your spirit—a pleasure I promise myself when this voyage is finished, when I have turned your father over to the proper authorities and have you to myself. I like," he said coolly, "my women mettlesome. It adds piquancy," he informed her, "to the situation."

The girl gripped the chair for support, her face paled.

"Come," cried the Commander, "give me a kiss. Just a foretaste of the sweets I shall garner later."

Ragnar waited for no more. The blood seethed in his veins, murder beat at his heart. Through the door he sprang, sending it open with a crash. The girl gave a little cry and stared incredulously. Franz Josef turned with a roar.

"You!" he gasped, his green eyes bulging.

"Yes, me!" cried Ragnar. "You thought you had me trapped, doomed, but I've escaped your trap. Damn you . . ." he levelled the automatic. "Put your hands up! Put them up—quick!"

But Franz Josef, villain though he might be, was no coward. Quick as lightning he dropped to his knees and from that position hurled himself forward with inconceivable quickness. His legs swept from under him, Ragnar went to the floor with a crash, dropping the weapon. Then commenced an Homeric battle. Over and over the two men rolled, punching, gouging. Franz Josef made no attempt to call for help. Perhaps he thought to overpower Ragnar himself. Perhaps he knew help to be beyond the sound of his voice. Whatever the reason he fought with only a growl in his throat, the growl of a bulldog that has come to grips.

Abnormally strong though he was, Ragnar sensed that the Commander of the *Taurog* was stronger still. Once Franz Josef had been an amateur wrestler of note and had downed a professional champion in a private match. No wonder he was willing to accept battle with Ragnar. His seeming fat was so much hard brawn, muscle, rigid, like iron; and he was bigger, heavier . . . heavier by some thirty pounds than the American. Only Ragnar's knowledge of a certain Jiu-jitsu trick enabled him to fight his way clear of a deadly tangle and regain his feet. Boxing was his forte. He must keep clear of the other's bear-like hugs or speedily be crushed into submission. He dazed the Commander with a left to the chin, staggered him with a right to the solar plexus, but a wild swing of the latter's caught him over the heart and drove him back—over the heart where once before that day he had been hit by the terrible impact of a bullet. Sick with pain, Ragnar's senses reeled, his body sagged, and with a grunt of triumph, Franz Josef rushed in for a body hold. If that hold were obtained, Ragnar was done for. He knew it, and calling on every ounce of his failing strength, he side-stepped, brought across his right to the jaw, his left to the short-ribs. Franz Josef gasped. Back Ragnar drove him, back, with a series of blows to the head, fighting purely on his nerve, the instinct of the great fighter. But again a flailing blow caught him on the chest, another smashed to the face. He was in agony, his head swimming, going down, sinking, and the Commander, with beast-like face, was diving in to finish him off.

AND finished off Ragnar would have been but for the girl.

Horrified, she had crouched in a corner, watching the terrific battle. But hers was no puny terror, though terror she felt. Her heart sang when Ragnar staggered his enemy, and contracted with fear when she saw him beaten back, going down.

"Oh!" she moaned, "oh!" and flung out her hands.

They struck the over-turned chair Franz Josef had jerked aside. The contact galvanized her into action. Suddenly she was an Amazonian, a woman of the Vikings. With a strangled cry she surged to her feet, caught up the chair, and as the snarling Commander dove in to end the fight, brought it down with sickening force upon his unprotected head. As if pole-axed, Franz Josef went down. Only the leather housing of the chair had saved his skull from being caved in. Ragnar staggered to his feet and turned to where the girl stood staring, with wide-stricken eyes, wringing her hands in an agony of apprehension.

"God," she prayed, "don't let him be dead!" And in a whisper: "I—I didn't kill him. Don't tell me I killed him?"

"No," said Ragnar weakly—though he wasn't sure of it—"he's only knocked out."

And then wonderfully enough she was in his arms, clinging to him, sobbing hysterically, and he was smoothing back her tawny hair, kissing her brow.

"There, little girl, there," he said softly; "don't let it worry you. Your hitting him over the head saved my life."

"I thought you were murdered," she said breathlessly, "back there at the house, shot. . . ."

"No," he said, "No. The bullet missed me. But I've no time for explanations now. Where's your father?"

"Locked in the cabin next to this. He has the keys." She pointed to the man on the floor.

Ragnar secured them, and the automatic lying to one side.

He lurched and almost fell, but it was not himself swaying, it was the ship. Suddenly she was pitching, groaning. Outside he heard a noisy clamor, the sound of men shouting. All wonder as to why none of the crew had been attracted to the cabin by the noise of the fight left him. Something more drastic was claiming the men's attention. There came a thundering rat-tat at the door of the lounging cabin where the mechanic's body still lay, dead to the world.

"Commander" cried a voice, "Commander!"

Franz Josef twitched, groaned.

"Quick!" hissed Ragnar, "we must be moving."

Along the passage he ran, at the girl's heels.

"Come!" he cried, flinging open the door of the Doctor's prison. "No time to answer questions, sir; follow us."

Bewildered, the Doctor obeyed.

A man, evidently a steward, came into the passage, and Ragnar shoved the automatic between his startled eyes.

"Silence," he warned in Martian, "or I'll blow out your brains." And then: "What's happening forward?"

"I don't know, sir," stuttered the steward. "Not exactly. But they say a new machine's beyond control—can't be shut off. . . ." Abject terror showed in the man's cat-like eyes.

The resistant rays! Ragnar started. They were pushing everything before them, crushing, rending, and if they couldn't be stopped. . . .

A low screech, like that of a live thing in agony, ran through the hull of the *Taurog*. The floor was slanting beneath their feet. Never had Ragnar's brain functioned more smoothly. It was like that with him; he always thought more clearly in the face of danger, when quick action was needed.

"Where are the emergency parachutes?" He prodded the steward.

"Forward, sir; there are none in this section at all."

"The life-jackets, then?"

"In that locker, sir."

With an oath he hurled the steward into the cabin and locked the door. He tore open the locker and hauled out its contents.

"Cork-metal life-jackets," he panted. "Here, put them on."

Hastily he fastened one on the girl and helped the Doctor strap his own. Silencing the latter's attempt to utter a word, he led the way along a narrow connecting passage aft, away from the clamor forward. The passage turned, gave access to the open deck, hardly more than a cat-walk. Even as they reached it, an ominous groaning and tearing shook the length of the cruiser. Glancing forward, Ragnar saw slender supports buckling, crumpling. Above him the vast expanse of gleaming metal twisted, sagged; below lay four thousand feet of empty space and a steel-blue sea. Someone was shouting, and from further aft rushed menacing figures. From the entrance of the passage they had just quitted, staggered a huge man whose gross, puffy-jowled face was black and blue and smeared with blood. The girl screamed. A bullet sang past Ragnar's ear. He thanked God for the forethought that had made him fasten the mail-plane's flat parachute to his back. It was now or never.

"All right," he cried, grabbing the girl under one arm and the Doctor under the other, "over we go!"

The air was a whistling hurricane through which they shot at express speed. Would the parachute open? It was designed to be fool-proof—a recent invention—but perhaps its automatic releasing device had been injured in the fight with Franz Josef, perhaps it was jammed. . . . All these thoughts ran through Ragnar's mind in the seconds he was falling; and then, just as he had given up hope, there was a sudden jolt, a sensation of going deaf, and dangling at the end of a vast umbrella of silk, the three of them were floating easily to the water below!

Looking up, Ragnar located the *Taurog*, and even as he did so, he was stunned by a dull explosion. There was a blinding flash of light, a searing blast of heat that scorched them even where they swung; then, wrapped in sheets of flame, the giant cruiser of the air came hurtling oceanwards to strike the water and disappear in a cloud of steam!

Horrified, sick at heart, Ragnar understood only too well what had happened, what he had leaped to avoid. Reaching the fuel-oil tanks used when the cruiser was inside the stratosphere, the resistant rays had somehow ignited the oil with their pressure—had blown it up!

Prince Franz Josef was gone, the crew of the *Taurog*, save for several that had leaped in parachutes, wiped out, slain by the invention they had tried to steal.

Ragnar shuddered. And yet it was better so. The tragedy would be listed as another regrettable accident of the air—as indeed it was. Only a few high government officials need ever be told the truth.

As for the rest, the enemy was foiled, the resistant rays invention would become the property of his own Government's War Department, and he himself. . . .

Already he could discern the smoke of tugs and steamers speeding to the scene of the disaster. Soon they would be picked up. Meantime he was floating on the water between the Doctor and the woman he loved, her tawny hair like seaweed drifting against his mouth.

THE END

The Metal Doom

By David H. Keller, M. D.

(*Continued from page* 337)

The people of the Stafford Colony had come for a house-warming. They stayed to spend the evening. There were speeches and singing. At last Stafford spoke.

"We have come here tonight to ask a favor of you, Paul Hubler," he said. "Will you go to Washington as our representative?"

Hubler shook his head, but Stafford insisted:

"You must go. We need you there. Your wonderful imagination will be of value to the new nation."

"It is kind of you to ask me," replied Paul Hubler, "but I cannot imagine how Ruth and Angelica could possibly get along without me."

THE END.

Thia of the Drylands

By Harl Vincent

(*Continued from page* 309)

dealing on the part of the Union when they bought Maranu and Vetter off without advising the League, they will deny it and will still insist that we keep the letter of the law on extradition. Neither of you may be harbored safely on Terra."

"I've always wanted to visit Callisto," Cliff said vaguely. He had heard of the idyllic beauty of that satellite of Jupiter from returning adventurers.

Leonard Sykes permitted himself a chuckle. "You read my mind, Barron," he said. "It is the very place for you and your bride."

"Bride!" blankly.

"Within ten minutes." Sykes beamed expansively.

With a gurgle of delight Thia crossed to where he sat and hugged him enthusiastically. Sykes reddened painfully, and every man in the room was consumed with envy.

A space pilot is vested with the same authority as is the captain of an ocean-going vessel of Earth. And so it was that Cliff and Thia were made one in a simple ceremony performed by Chet Andrews.

"Now we come to the means of getting you two to Callisto," said Sykes, when the congratulations and felicitations were over. "Of course it is impossible for the H-4 to carry you there; the ship would be missed by the Interplanetary Police if she were to be away for so long."

"What then?" Cliff asked.

The financier's eyes twinkled. "You've been itching for a long time to sit at the controls of an ethership, haven't you Barron?"

"I'll say so!" Cliff looked down at his strong hands, so lately clawed and useless. "Ever—ever since——"

"Exactly." Sykes grinned understandingly. "Well how would you like to take over the H-4's tender?"

"You—you mean——"

"I mean I'm giving you the Hornet. Take her and go to Callisto with your charming wife. And, some day perhaps we shall pay you a visit there—some of the boys and myself. What do you say?"

Cliff said nothing. He couldn't speak for the fulness of his heart, but his grip said more than mere words.

"It'll be a fine little ship for a honeymoon," Sykes added, his eyes misting and his voice wistful.

When the tiny ethership Hornet slipped from her airlock in the side of the H-4, Thia was beside Cliff at the controls. They waved a farewell to Chet and Sykes as Cliff maneuvered to pass the forward port of the H-4. And then the Hornet drove off into the blackness of the star-studded heavens.

They passed the bullet-like shell that was the tomb of Vetter and the last lot of drylanders he had murdered.

"I did all I could for them," Thia murmured.

"Yes." Cliff set a course for the orbit of Jupiter. "You've done far more than your share, my dear."

"You're not sorry?" she whispered dreamily.

"Sorry!" Cliff looked off toward the H-4; saw the sudden flare of her stern rocket tubes as she made for Terra. "Sorry! Why, I'm the luckiest man in the universe. I've always been a drifter, a lover of faraway places. Earth was no more my home than Mars or Venus. And now I'll not only have a new home and the means of traveling through the heavens when I like—I'll have *you*."

Thia dropped her tired head to his shoulder. "I too," she sighed blissfully. "What more could I ask?"

They sat thus, silent for many minutes, while the Hornet drove on into the void toward the new land and the new life that held such promise of happiness. And when next they spoke, it was only of the future.

Callisto, is second in size of Jupiter's satellites. It is 2,960 miles in diameter, which is over one-third the dimeter of the earth. Its orbit is about 2,300,000 miles from Jupiter. Its name, with an English termination, indicates "most beautiful."

THE END

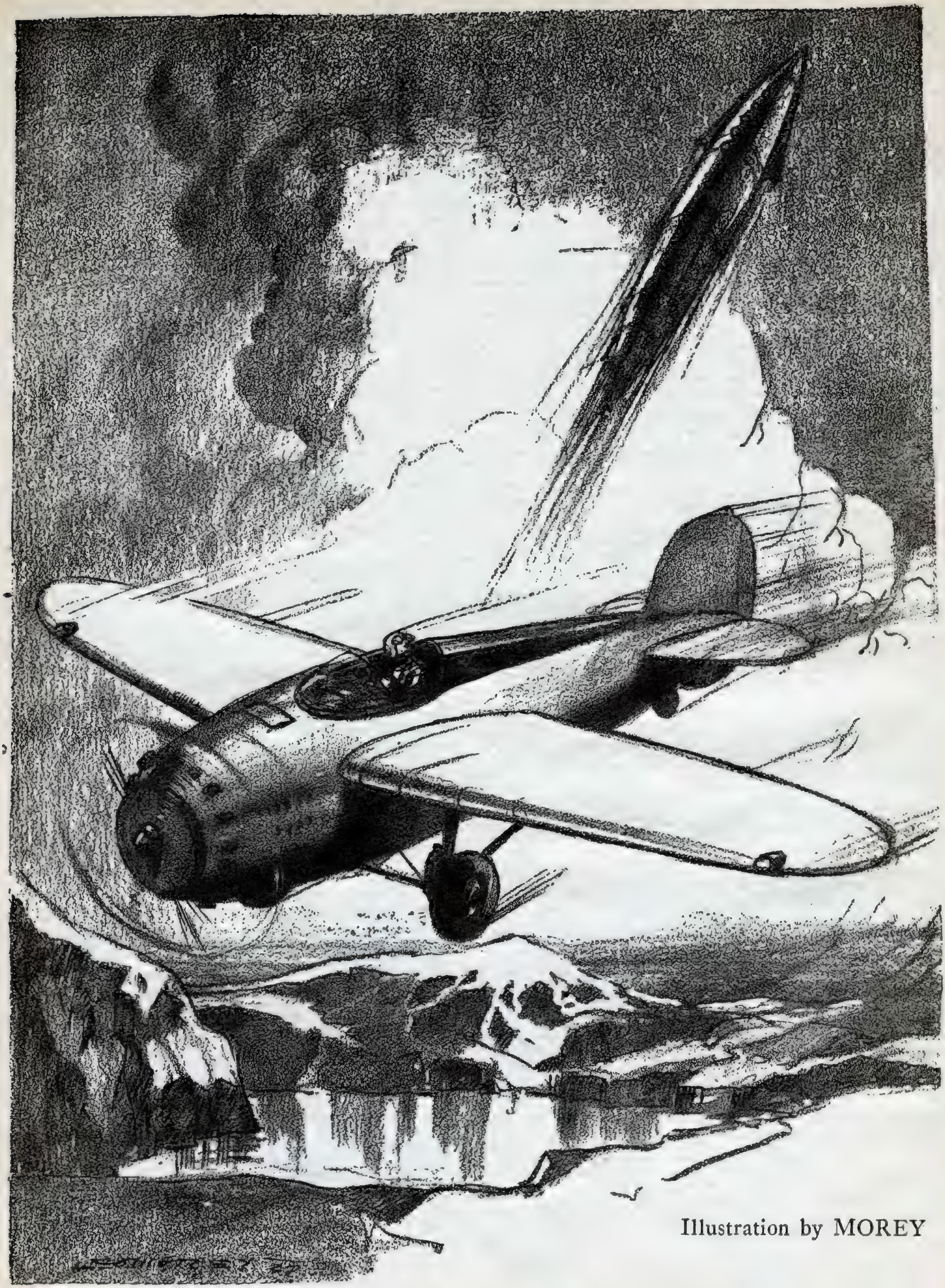


Illustration by MOREY

This unique demonstration apparently had originated in the whereabouts of his destination and Jimmie was puzzled and a little anxious. He opened wide the throttle, and when dawn broke an hour later he circled over Lost Lake, landed and scudded swiftly up to the north shore.

Sheridan Becomes Ambassador

By Warren E. Sanders

AMBASSADORS are born, not made. And international relations—or interplanetary, for that matter—depend largely on the nations' representatives. Sheridan was anything but a trained diplomat, and going anywhere in that capacity was furthest from his mind—yet he went—unexpectedly, of course—and worked wonders to save the Earth. This story is entertaining, excellently written and very convincing.

CHAPTER I

The Tower of Atlantis

WE are all familiar with the details of the arrival of the "Toltan Queen" at Langley Field. A few weeks ago the newspapers were full of it, and also of Sheridan's official call at Washington as Viceregent for the Council of Thule.

Patterned after the "Toltan Queen," two large ships are under construction and the Interplanetary Radio spire is almost complete. Under Sheridan's personal supervision, the pyramid of Atlantis has been entered through the diving bell and the tower again has been raised above the surface of the lake. Now, after a lapse of seven years, the Council of Thule has removed the barrier and there is no longer cause for secrecy. I finally have prevailed upon my friend Burns to give me the facts in connection with Dan Sheridan's momentous discovery of the blue ray projector and his subsequent trip to Li-Atlanthi.

Burns played only a minor, though vital, part in the affair. It was he who discovered the tower, while he and Sheridan were vacationing in South America. They started from Puerto Acosta, on the east shore of Lake Titicaca, and traveled by canoe down the headwaters of the Heath until they came to the very edge of Bolivia's table land—and Lago Perdido.

Lago Perdido, Lost Lake, is aply named. It is almost inaccessible. Its bed is an ancient crater in the midst of a rugged wilderness of serrated peaks. It is less than a mile wide, almost circular and completely enclosed by a high, precipitous cliff. In a series of treacherous, rock-strewn rapids, the stream they followed tumbles into the lake. The outlet at the northern edge, they found impassible. The water cascades through a cleft in the wall and falls almost sheer for a hundred feet; the first step in its tumultuous journey to the marshland twelve thousand feet below.

But they didn't want to go any farther, anyway. They were enchanted by the little lake. A large, sandy cove promised an ideal camp site and they were paddling toward it when they first saw the dome of the tower. Not that they then knew it as such. To Sheridan, an instructor in mechanical engineering, it looked like any number of other large, round boulders, he had seen in any number of other lakes. But Burns was a geologist, and its peculiar shape aroused his professional interest.

It was not a formation of Nature. From the network of finely joined seams visible upon close inspection, it became evident that the twenty-foot hemisphere was the handiwork of man; obviously the dome of some structure built before the crater filled with water. And it was just as obviously ancient—much older in appearance than any of the Inca temples, so numerous in that portion of South America.

Naturally, Burns was highly excited over his find and immediately set out on the return trip to civilization after tools and equipment with which to force an entrance. As the way led up-stream, he left the canoe with Sheridan, who remained at the lake to establish camp. He didn't expect to be gone long, but unforeseen contingencies intervened and a month elapsed before he again saw the still, blue water of Lost Lake. And in the meantime, Sheridan had launched upon one of the strangest adventures in the history of the world.

In his quiet, taciturn way, Burns supplied me with the foregoing facts, then he let me read Sheridan's diary, upon which the following account is based.

LESS than an hour after the departure of his friend, Sheridan missed the axe and paddled out to the dome where Burns had dropped it after an ineffectual attempt to break through the time-worn, but hard and flinty masonry. Looping the painter rope to his belt to keep the canoe from drifting away, Dan climbed up and sat down on the slightly raised, five-foot slab that formed a circular capstone at the crest of the dome. Half wishing he had gone back with Jimmie, Sheridan picked up the rock hammer lying beside the axe. He was not aware of his idle tapping with the hammer until an odd, shallow quality in the sound gradually penetrated his abstraction.

Experiment located the hollow place in the exact center of the capstone. It was the work of but a moment to break through and chip off the ragged splinters of a thin shell which disclosed to his astonishment, a six-inch, cubical recess carved into the rock. After removing the fragments of stone which almost buried it, Dan saw a shiny, three-inch lever, the vertical end of which was embedded in the bottom of the hole.

More than a little dazed, he took hold of the handle and gave it a tentative twist. It seemed stuck fast. A slight pull and it raised an inch or so and stopped. Having yet to learn the steel-like strength of that translucent material, he dared not pull harder, so he tried another twist and it turned half way around, where it tightened and stopped again.

But results were instantaneous and amazing. A noiseless tremor, a dull crackling of splintering rock, and the capstone began to rise above the surrounding masonry! Before the astonished Sheridan came to his senses, it had risen to a height of some five feet, where it stopped of its own accord. Of the same translucent material as the lever, four slender rods extended from sockets in the rim of the hole and held the heavy capstone aloft, like a massive table top, supported by thin, spindly legs.

When the full significance of his accidental discovery dawned upon his mind, thoughts of his friend, toiling across the mountains on the now useless trip, made Dan swear at the perversity of Fate. "Well," he muttered at last, "I'd never be able to catch him now, and we'll probably need the tools later on, anyway."

Somewhat mollified by this thought, Dan peered into the hole. He expected to find it filled with water to the level of the lake and was not a little surprised when he saw a circular well four feet in diameter, with walls of smooth stone, and less than three feet deep.

Dan Sheridan scratched his curly, red read in perplexity and straightened to his superbly muscled height of six-foot-one, looking askance at the shallow hole. A puzzled frown replaced his usual quizzical, Irish smile, while piercing blue eyes took in every detail of the astonishing lay-out.

The smooth floor seemed also to be stone, but it didn't quite fit and through the narrow interstice between the floor and the wall, a current of warm, fragrant air was flowing! Embedded in the center of the floor were two four-inch disks; one white and the other red, and when Dan climbed cautiously into the hole, he inadvertently stepped upon the red one.

Without warning, the floor gave way and he dropped at dizzying speed. Forty or fifty feet below, the floor came to a smooth stop, and as soon as Dan recovered from his fright, he concluded that he had just treated himself to an unexpected ride on some kind of elevator. He was right. When he placed his foot over the white disk, the floating floor rose swiftly upward, to its former position at the top of the well.

Doubtless you have read in the newspapers, numerous descriptions of the tower of Wo-Atlanthi, but for the benefit of those who haven't, a brief sketch of what Dan found would not come amiss.

There were three floors, all opening off the lift well. Each floor was circular, centering around the well. The ceilings were domed reflectors for a highly efficient lighting system closely approximating that of veiled sunlight. Fresh, invigorating air from some unknown source circulated constantly through the entire structure. The two top floors were single rooms some twenty or thirty feet across, but the bottom level was slightly larger, and was cut into quadrants by partitions of tessellated stone and tile. These four rooms comprised obvious, but strange and surprisingly modern living quarters.

While exploring the tower, Dan had left the canoe tied to one of the glassite rods under the capstone, and the thought of it caused an idea to flash into his mind. These odd quarters would furnish a far more ideal place to camp than out of doors!

He promptly moved in.

The room comprising the top level was bare. Completely circling the outer wall perhaps five feet from the floor, a ring of round, foot-wide ports framed thick panels of glass, or of quartz. These panes were transparent to their corroded outer surface, and Dan rightly concluded that the room had been used as an observatory.

The second floor, the level between the observatory and the living quarters, was a single, round room like the one above, and like the remainder of the tower's interior, was built exclusively of polished white stone. It was here that Dan found the blue ray projector, and one more mystery was added to the rapidly growing count. The power actuating all this astonishingly modern equipment was without doubt some form of electricity, but Sheridan, knowing nothing of the pyramid below, had searched the tower from top to bottom without finding any trace of a power plant.

Being one of the foremost authorities on the subject of radio-television, Dan was soon immersed in a detailed study of the projectors. A sixteen-foot section of the outer wall was covered from the floor to a height of seven feet by a screen of closely woven, fine silver wires, held in a metal frame six or eight inches from the wall. Through the fine mesh, Dan could make out a row of five circles in line with the floor at the center of the screen. When he peered behind the screen at one of the circles near the end, he saw that they were slightly concave disks extended on thin, metal axis from sockets in the wall. These disks, he knew, comprised the auditory system.

On the inner, or well-wall and just above his head, was a row of five small lenses, focussed on the screen directly across the room. On an inlaid panel below the lenses were five small dials and a large knob, undoubtedly a switch. On the floor immediately beneath the lenses was a metal chair facing the screen and behind a low table, or desk, the slanting top of which contained innumerable dials, buttons and knobs. A two-inch ball of shimmering crystal was set into the upper end of a down curving arm, the base of which was anchored in the midst of the maze of dials on the desk.

Experimentally, Dan threw the switch below the lenses and the dome lights went out, but the crystal ball above the desk burst into a queer, blue glow that bathed the chair and its immediate surroundings in a funnel-shaped beam of soft, eerie light. Returning to the chair, he depressed the center one of five large, red buttons standing in a row at the top of the desk. A loud "click" sounded from behind the screen! Nothing else happened for several minutes, but just as he was about to push another button, a three-foot section in the center of the screen lighted up with a whorl of dazzling color! After an instant of distorted writhing, the image steadied and cleared, and with an oath of pure excitement Dan jumped to his feet.

Life size and in natural colors, a strangely garbed man stood in the lighted panel and returned Sheridan's stare of surprise and amazement!

That is how Dan Sheridan first met Jon of Thule.

IN the projection chamber, two weeks later, Dan looked up from a sheaf of note paper in his hand and addressed the man on the screen.

"Must we always study, Jon? There is so much I want to know, and you have told me almost nothing except your name and that you are in Li-Atlanthi. I don't even know where Li-Atlanthi is located."

The Atlanthian smiled. His answer, low but distinct and pleasantly modulated, sounded from the depths of the screen:

"You are impetuous, Dan. I, too, am curious, but wish to have accurate information. However, if you make no mistake in reading the translation of yesterday's problem, your studies are over."

Dan read. A trifle slowly, perhaps, but concisely and without hesitation. He had found the musical, phonetic language of Atlanthi surprisingly simple, and under Jon's peerless guidance, had already acquired an extensive vocabulary.

The Atlanthian rose to his feet, and while slightly below average height, a short, one-piece tunic of crimson bordered, metallic white cloth revealed the superb physical form of an Apollo. Thin, tawny hair, cut well above the shoulders, was held in place by a band of lustrous metal and was in odd contrast to the dark features. His eyes were fathomless pools of flashing jet, set beneath a wide, bulging forehead. The face as a whole was decidedly ascetic, and gave one an impression of profound intelligence.

"Very good, Dan," he approved, when Sheridan had concluded his reading. "You should experience no difficulty when you appear before the Council." Then, forestalling another eager query from Dan, he continued: "I am sorry, Dan-Sheri-Dan, but before we can talk of the many things of interest, you must first be interviewed by the Council. I shall assemble the Council and call you after the period of sleep."

Arm raised in a gesture of farewell, Jon turned and stepped out of the narrow panel of light. With an audible click the panel vanished and the screen was blank. Dan snapped the switch to his own projector and sank wearily into the metal chair.

What did it all mean? Who were the Atlanthians? Must be some sort of secret cult; he had never heard of them before. Curiosity had driven Dan to relentless effort in his task of mastering the language in the shortest possible time. He had applied himself assiduously and was justly proud of results. The stately Jon, however, had not seemed at all surprised, but during his daily periods of instruction, seemed to take his pupil's prodigious achievements quite as a matter of course.

CHAPTER II

The Council of Thule

TAKING his field glasses, Dan went up early the following morning to look for Burns. Standing on the lift under the towering capstone, he scanned the rapids in vain. What could be keeping Jimmie? Something must have happened; some accident may have overtaken his friend and Dan was more than a little worried. After tying a white cloth to the lever in the capstone to attract Jimmie's attention when he returned, Dan went below and ate breakfast.

When the buzzing signal of the auditors sounded through the tower, Dan hurried to the projection chamber.

"Greetings, Dan-Sheri-Dan," came Jon's familiar salutation. Then stepping a little to one side, the Atlanthian bowed formally; a sweep of his arm indicated a mass of blurred outlines behind him, and he announced:

"The Council of Thule; the Lawmakers of Li-Atlanthi."

Dan turned a knob on the instrument desk and the blurred silhouette in the background took form. On the single panel, only a portion of the scene was visible, but when he switched on the other four projectors, the entire screen burst into life, showing seven men standing around an octagonal table, on the center of which stood a square, metallic, black box.

Taking his place at the vacant segment of the table, Jon introduced the Council, its members bowing with formal dignity as they were indicated.

Avor, the Reis, or Captain, who stood squarely facing Dan from behind the table, was the first to be presented. Next came Daton, the Historian, and Roo, Chief of Communication. Tlax, Jalon, Oaxa and Tepec followed in their turn, and all were Scientists, each heading a definite group, or division, in their system of government. Jon, as Dan already knew, was a physicist.

At first glance, Dan would have sworn that the eight men were brothers, but a closer scrutiny revealed the small differences that distinguish and characterize the individuals of any race, no matter how similar their stature, dress and general resemblance.

Avor, their leader, was slightly taller than the others, but he wore the same red-bordered tunic; his only symbol of office being a brilliant jewel, apparently a cut diamond, almost as large as a walnut, set in his head-band.

When the brief introductions were over, the Councillors seated themselves in a semi-circle behind the table while Dan sank into his own chair, overawed by the impressive grandeur of the assemblage. Their haughty mien added nothing to his comfort, and he turned his eyes from Avor's noble, yet peculiarly arrogant countenance to the one friendly face in the group. Jon, at a stately nod from his superior, took charge of the situation.

"No doubt you find our customs strange, Dan," he began, going directly to the heart of Sheridan's discomfiture. "We do not wish to seem inhospitable, but a bitter lesson taught us caution.

"Several hundred periods past, scientists of Altepec succeeded in communicating with the inhabitants of Guantepec. Jubilant at finding intelligent neighbors, our people gave too freely of their accumulated store of knowledge, for the war-like races of Guantepec used this knowledge basely; built and powered a fleet of space ships in which they invaded us. Thousands of lives were lost before the invaders were finally annihilated. After this experience it was decreed that before friendly relations shall again be established with another world, the Council of Valis must first decide how such relations might affect our welfare. So you see, Dan, why I have answered none of your questions. But perhaps, when you have told us something of Toltepec and its people——"

With which courteous implication, Jon subsided.

Dan's mind was in a whirl. Had he heard aright, or was he experiencing a weird dream? For a moment the magnitude of his thoughts staggered his imagination. Atlanthi on the planet Venus? Unbelievable! Yet he knew that Altepec, in Atlanthian, is a compound word meaning second rank, or second place. Toltepec, meaning third place, had been applied to the Earth, which any schoolboy knows revolves around the sun in the third orbit. Then Guantepec referred to Mars and Altepec must be Venus! The fact that he was in audio-visual communication with the inhabitants of another planet was hard to grasp. Yet where on the Earth could such a strange race be found? People whose development had reached the point of taking as a matter of course such things as space navigation, interstellar television and interplanetary warfare? So the Martians had invaded them. No wonder they were cautious! What a terrible thing it must be for a horde of space ships suddenly to descend from out of the void; terrible, monstrous engines of destruction, broadcasting chaos and death upon an unsuspecting, wholly unprepared world.

BUT, on the other hand, what an ideal situation could develop from a state of friendly commerce between Venus and the Earth! What untold benefits to mankind might be reaped from such relations! A mutually profitable traffic in commodities and ideas! Scientific advancement! Strange, new materials! In his mind's eye, Dan saw new industries spring into being, new interests awaken and miraculous progress made. Utopia!

But what of that austere Council? Dan was placed in an unenviable position. The Atlanthians would consider him as representative of all mankind and he longed fervently to share the responsibility with someone else. How he wished for Jimmie!

"How is it, Dan-Sheri-Dan," began Avor, "that you always seem to be alone. Jon has seen no others of your race. But perhaps you are a ruler among your people?"

Hastily disclaiming any such distinction, Dan launched into an explanation of his presence alone in the tower. His audience hung upon his words with such attentive intelligence that Dan had regained a measure of his composure by the time he had finished the account of how he and Burns had discovered the tower; how the latter had returned to civilization for aid, and how he, Dan, had discovered the entrance, found the projectors and tuned in on Jon's signal.

"—and because Jon's projecting apparatus necessarily must be similar," he concluded, "I surmise that this tower is in some manner associated with your world?"

Avor and the Historian exchanged meaning glances.

"As chronicled in the ancient tomes," acknowledged Daton, "the forefathers of our race left such a projector in the tower of Wo-Atlanthi when they deserted Toltepec thirty thousand periods hence. Yours, doubtless, is this same projector."

Dan made a rapid mental calculation. Venus' period, he knew, was approximately two hundred and twenty-five Earth days. Then thirty thousand Atlanthian years would be equivalent to nearly twenty thousand Earth years! But when he voiced his incredulity, Dalton smiled.

"Valis was wise indeed. When the Refugees left Wo-Atlanthi, Valis caused the generators to be fueled for fifty thousand periods, thus insuring themselves of a haven, should it prove necessary in future to return to Toltepec."

"Fuel for fifty thousand years?" remonstrated Dan. "Why man alive! That isn't possible. And besides, where are the generators?"

Daton's smile deepened. "The three upper levels of Wo-Atlanthi," he began, but Avor interrupted:

"You say, Dan-Sheri-Dan, that only the dome of the tower protrudes from the water. Then the terrain has not changed greatly, for Wo-Atlanthi was built in a crater on a large island."

"An island?" objected Dan, puzzled. "This tower is in an extinct crater, all right, but it is not on an island. It is near the center of a vast continent, instead."

Which statement created a stir of excitement among the Councillors. For several minutes they waged a low-voiced discussion among themselves, their words too rapid for Dan to catch. He did notice, however, that Jon seemed to be protesting against something suggested by Avor. Presently the latter resumed:

"We are rather surprised, Dan-Sheri-Dan, to learn of the presence of a large body of land upon Toltepec. When the Refugees left your world ages ago, it was completely covered with water. Only barren, rocky islands showed above the seas. Your presence indicates that somehow, mankind survived the deluge, but we had pictured yours, as a world of comparatively small, isolated islands. The migration of our forefathers was caused by the uninhabitable barrenness of these little islands, for although the ships of Valis circled the globe many times, no trace of habitable land was found."

"By George!" exclaimed Dan, in English. Then remembering his audience, elucidated:

"There is a legend among our people, thought by some to be a myth, that many thousands of years ago our world was completely destroyed by a flood of water, and that only one man and his family escaped by building a large vessel that floated upon the waters until they subsided. Your records would seem to bear out this legend—in regard to the flood, at any rate!"

"Very interesting," commented Avor, as Daton, who had been turning the pages of a metal bound book, evidently found what he sought and whispered a word to the Reis. Avor studied the open volume for a moment and nodded.

"Daton has found a way to settle any doubt as to whether you are in the tower of Wo-Atlanthi or some other. Is there, perchance, on the instrument desk before you, a short, upright bar of engraved metal?"

There was. Dan had often wondered what purpose it served, and he was soon to learn. Following Avor's instructions, and all unsuspecting the consummate trickery behind them, Dan lifted the little bar from its socket and held it before the crystal. Avor scrutinized it carefully and exclaimed:

"There is no longer a doubt, Dan-Sheri-Dan. Engraved on that bar is the Royal insignia of the House of Valis. But tell me; are you familiar with that metal?"

Sheridan examined the bar. "Silver? Why sure. Although it is still classed as a precious metal, it is mined in abundance at various points."

"That's strange," remarked Avor, absently. "Before the cataclysm all the silver was thought to have been mined. When Valis left Wo-Atlanthi, a large quantity was—but tell us more about Toltepec."

DAN complied. Prompted by occasional, comprehensive questions from first one and then another of the Councillors, he described the Earth, its continents and cities; the customs, religions and governments of its different nations. For more than an hour he talked, pleased at the sudden friendliness of the Atlanthians. A friendliness just a little overdone, Dan decided when he realized, all at once, that he had done most of the talking—realized that the few questions he found opportunity to ask, had in most part been skilfully evaded. He had just finished a graphic resumé of our scientific achievements. Radio, television and airplanes had been touched upon. He had just started a rather boastful description of our latest developments in the line of deadly weapons, when he suddenly felt that he was being adroitly cross-questioned. Perhaps it was his subject; knowledge that he had been dispensing dangerous information—that brought him to. Was he unduly suspicious, or did he really see subtle cunning in Avor's eyes? Dan shifted his glance to Jon, who slowly shook his head in an unmistakable manner. Avor, also, noticed Jon's action, and although millions of miles separated them, Dan could feel the tension which developed. The very air seemed charged. Then things happened with abrupt celerity.

Jon had risen to his feet, but before he could speak, Daton drew from beneath his tunic a stubby cylinder of polished metal closely resembling a flashlight. The rays which enveloped Jon were a deep blue and must have been deadly, for without a sound he crumpled limply to the floor. Two stocky men garbed in black tunics materialized, and carried him out of Dan's field of vision.

Sheridan was horrified by this totally unexpected show of violence. He watched, bewildered, while Daton calmly pocketed his weapon and resumed his seat, wearing on his face an expression of careless insolence that made Dan's blood run hot.

"What the devil——" he began, explosively, clenching his hands and stepping closer to the screen. Then remembering, realizing his helplessness, he sank back into his chair just in time to see Avor press a button on the octagonal table. Too late Dan sensed danger and tried to move. The blue ray from the crystal ball changed to a deeper hue and a cold numbness clutched him and every muscle in his body was seized in a vise of paralysis. Stark terror gripped him, but only for a moment did he fight, silent and motionless. He soon realized that his struggles were useless, and relaxed. The red haze of fear cleared from before his eyes and Avor's face, wearing a sardonic smile, leered at him from the screen. His expression changing to a serious frown, the Atlanthian spoke:

"The paralysis will soon wear off, but he warned. The blue ray can be made to kill also. I do not wish to kill you, for you can be useful. You see," he explained, "when we learned that Toltepec is again habitable, a world of vast, rich continents, we conceived the idea of colonizing it. We regret that we cannot come to you as friends; that is not possible, and there is where you can serve your world. By furnishing us with certain specific information, thousands of lives may be saved."

Dan, who had been listening in amazement to this astonishing dialogue, felt the numbness leaving him and knew that in a few seconds he would be able to move. But he must be careful—damned careful—for he must somehow escape and give warning to the world. He did not for an instant doubt that Avor was capable of carrying out his implied threat; he had seen too much of their sciences. Dan had unwittingly betrayed mankind into the hands of a world of super-fiends and he must manage somehow to counteract his incautious blunder. The paralysis was completely gone. Dan carefully shifted his position, his eyes never leaving Avor's face. In a tone held level to cover his seething emotion, he asked:

"What do you want of the Earth?"

"Silver, principally," replied Avor.

"But surely you have something you could trade for silver."

"Probably, but why should we, an ancient race, traffic with savages? Our civilization is at least fifty thousand years in advance of yours. You are prolific, greedy and warlike. You would soon absorb our arts and sciences, then conquer us with them. No, our worlds cannot be friendly."

The Atlanthian's colossal arrogance was maddening, and in spite of himself, Dan flared up. How he would love to smash that supercilious face.

"And so you'll just take what you want, eh? Well, you won't find that as easy as you seem to think. Thank Heaven I woke up before I told everything I knew!"

"What you told is sufficient, if need be, and it is faithfully recorded." Avor pointed out the square, black box on the table, taking his eyes away from Dan for a fraction of a second. But it was enough. Dan had been watching for just such an opportunity. A convulsive leap carried him from the chair and out of the fan-shaped path of the blue ray, barely ahead of a gruesome fate. Safe at once side, he watched the ray turn from deep, dazzling blue to a violet-tinged red, and the metal chair Dan had so recently occupied became incandescent and melted into a pool of liquid, while the stone floor crackled and chipped under the terrific bombardment.

"You lose, Avor," laughed Dan, rather shakily, glad that the Atlanthian could no longer see him. "I beat you to it. Now I shall go and prepare a reception party for you, and I promise you it will be plenty hot. If you are as smart as you seem to think you are, you'll stay at home."

It was Avor's turn to laugh. "You have evaded the ray, true enough," he conceded. "But you are still my prisoner. Do you recall showing us the little silver rod? When you took that rod from its socket, you started automatic mechanisms which by now, have sealed the entrance and *lowered the tower into the pyramid.*"

With an oath, Dan jerked the switch that disconnected the projector, and when the dome lights flashed on, he dashed madly into the lift well. He pulled the lever to the capstone mechanism, but there was no response.

Running the lift to the top of the shaft, he examined the underside of the capstone and drew back in dismay. Little beads of moisture had collected in the minute seam between the stone and the dome. Avor had not been bluffing; the tower undoubtedly was submerged.

CHAPTER III

Zahna

HAD Dan succeeded in gaining access to the pyramid, he might then have located the machine that would raise the tower to its former position, but although he searched every foot of the third level, no faintest trace of concealed opening nor passageway could he find. He wasn't particularly worried over his own predicament; he still had supplies enough to last until Jimmie would return, start searching and eventually effect a rescue. But all that would take time; perhaps weeks, and in the meanwhile the Atlanthians might launch their attack. No, Dan couldn't wait for rescue; too much depended upon his immediate escape.

Returning to the projection chamber, he manipulated every knob and switch on the instrument desk in a vain effort to strike the right combination to the tower-hoist motor. Then he thought of signalling an Earth broadcast station, and although entertaining but little hope of success, started a systematic search with the dials. Several minutes passed before his efforts were rewarded by a jumble of confused sounds from the speaker. Careful adjustment of a dial and the sound developed into a voice. A silvery, low-pitched voice, pleasant and somehow captivating, despite the fact that Dan immediately recognized the unmistakable syllables of Atlanthi. To protect himself against further assault *via* the blue ray, Dan had switched out the pickup crystal before commencing his experiments, but he was curious to see the owner of this voice, and knowing that with the crystal out of the circuit he could see without being seen, he threw the switch to the visual screen and drew back with an involuntary exclamation.

A high-backed, semi-circular divan of stone held a nest of colorful cushions. Therein, half reclining in a posture of unconscious abandon, was an extraordinarily pretty girl. An exotic white costume of shimmering fabric revealed the contours of a perfectly-rounded figure. One foot was buried beneath a silken cushion; the other, swinging from the side of the couch, was encased in a dainty, wrought leather sandal. From shapely knee to tiny sandal her leg was bare, and its glowing, golden-white texture matched in allure, the exquisite symmetry of its form.

Ending in a straight line at her shoulders, pale yellow hair fell in soft ripples; a tawny coronet of spun gold, framing features of classic beauty. In startling contrast to her golden coloring, her eyes were a deep, velvety black, set beneath thin-pencilled brows and the high, slightly-bulging forehead typical of her race. She was speaking to someone invisible to Dan, and the music of her voice held him spellbound. The words themselves did not register a meaning until a familiar name caught his attention:

"You must be very careful, Jon. Should the dungeon guard discover your microdial and guess its use——"

She broke off and listened attentively to a metallic, fluctuating vibration almost inaudible to Dan, but which obviously was a mechanical reproduction of Jon's reply. After a short interval, the girl spoke again:

"Yes, I have tried many times. The directional beam is trained upon Toltepec and the power is full on. I am afraid, though, that because of his experience with the blue ray, Dan-Sheri-Dan will avoid the audiview unit and we can only hope that he made good his escape."

Sheridan listened in astonishment. Evidently, he was the subject of the conversation between Jon and the pretty girl. It also would seem that they wished him well, and for some reason the girl had been trying to signal him. Maybe she had some message from Jon; information that would be of value. Well, he would soon see. He snapped over the switch to the pick-up crystal, but chose to be cautious and stood well outside the ray. When he spoke, the girl glanced up, startled; then the radiance of a winsome smile transformed an elusive air of superintelligent severity into a halo of vital charm.

"Ah, Dan-Sheri-Dan, many times have I tried to call you." And after an expectant pause, she continued: "But do not hide; you will be safe in the blue ray, for Jon and I would be your friends. Our carrier beam is shielded by an insulating layer of magnetic force that makes it impervious to influences outside this laboratory. Avor is our enemy, as well as yours, but we are safe from any of his prying rays."

Dan no longer hesitated. With a flash of thankfulness that he had shaved that morning, he stepped into the funnel of light from the crystal. As those piercing, black eyes took in every detail of his appearance, Dan felt rather self-conscious. Open necked, gray flannel shirt, khaki trousers and laced boots probably made a costume as strange to her, as the one-piece tunic of Atlanthi seemed to Dan. The girl on the screen arose from the divan, pressed a button on a pedestal-like instrument board close by, and with lithe grace moved nearer and nearer to Dan until in stereoscopic illusion, she seemed to stand out from the screen.

"I am Zahna," she stated, simply. "Jon, whom you already know, is my father."

"ZAHNA—White Flower," interpreted Dan to himself. Aloud, he said: "And never was a name more appropriate."

The eternal feminine was revealed in the pleased smile, with which Zahna regarded Dan for an instant, before she turned and retraced her steps to the divan, bare arms and shoulders aglow with golden highlights. Never will Dan forget that instant. Although separated by many millions of miles, he felt the presence of her enchanting personality and vivid beauty. He almost could believe that she *was* present; that by reaching out, he could have touched her as she stood, hands outstretched to him in token of friendship. Neither will he ever forget one little detail of the picture she made; the wide, gem-encrusted girdle which held to her supple waist the clinging folds of the white tunic. The short skirt fell in petal-like, jewel-tipped points about her knees, while above the girdle, two wide bands of the same shimmering fabric formed a bodice by crossing in front and behind, tapering upward into narrow shoulder bands. Never before had a woman stirred within Dan such a thrill of restless emotion!

Once more ensconced among the cushions, the soft, husky voice again sounded from the screen as the fair Atlanthian said:

"Jon and I had hoped, Dan-Sheri-Dan, that you had made good your escape—that perhaps the ancient mechanism for lowering the tower had, perchance, failed to work."

Dan then told her how effectively he was trapped; of his unavailing search for some hidden exit, and explained how he had been trying, through the audiview, to get in touch with his own world, when he had tuned in on her conversation with Jon, and in answer to Dan's inquiry, Zahna replied:

"My poor Jon is in the Castle dungeon." For a moment she stared dejectedly at the floor, then raised her head with an air of resignation and continued. "He bade me tell you that knowledge of the controls for raising the tower of Wo-Atlanthi is contained only in the original record. Avor, through Daton the Historian, has possession of this record. Our common histories do not go into such minute detail, although they do describe how the space ships of Valis passed through the huge water lock at the base of the pyramid. Perhaps, when I have told you how to reach the lock, you may be able to devise some means of protecting yourself from the pressure and by some method or means, make your way to the surface."

For the next hour, Dan was busy with pencil and paper, making notes and copying various sketches which Zahna held up for him to see. Not until he had buttoned these notes in a shirt pocket, did he ask a question that had been puzzling him for some time:

"Can you tell me, Zahna, why there is no perceptible time loss in our conversations? I have been taught that radio waves travel at the speed of light, which would require some two and one-half minutes of our time to travel from your planet to the Earth."

"Although I have assisted Jon at some of his experiments with the carrier beam and am fairly familiar with it, your question is rather difficult, because our technical terms would have no meaning for you," replied Zahna. "In effect, however, the beam method does not employ the usual divergent wave front; in fact, it has no wave motion at all. It is a tightly-focussed beam which, of course, travels at the speed of light until it reaches some object tuned to its frequency, and which is capable of grounding it, when it becomes inert. Thereafter, any change of potential impressed upon it at either end causes a similar and simultaneous fluctuation at the opposite end; the ionized ether particles maintaining their relative positions in a rigid line. Theoretically, there is a small time loss, but for practical purposes it is not noticeable."

Marveling at the girl's obvious technical training, Dan digested this very enlightening little discourse on the properties of the blue ray. Shortly he propounded another query, but this time it was of an altogether different nature:

"Does your history account for the cataclysm which caused your ancestors to leave the Earth?"

Zahna looked up in surprise.

"You do not know the story of the cataclysm of old ancient Tanina?"

Dan replied in the negative, explaining that the recorded history of Earth covered a scant five thousand years; only a fraction of the time since the departure of Valis from Wo-Atlanthi.

CHAPTER IV

The Death of Atlantis

"As far as we have been able to discover," stated the fair Atlanthian, proudly, "ours is the oldest race in Ra's planetary system. Our histories cover a period of more than a hundred thousand years, and if you wish, I will tell you how Tanina's birth caused the death of old Atlanthi."

"Do I wish!" enthused Dan. "Why there are men of my race who would almost give their lives to hear that story. Plato, one of our early-day philosophers, wrote of a continent called 'Atlantis' which sank beneath the sea!"

"Probably the same," nodded Zahna. "That is exactly what happened to Atlanthi. Until the reign of the Fifteenth Nomani, Atlanthi stretched diagonally across Toltepec's equator; a beautiful continent covering nearly a fourth of the world's surface. To the east, across a placid, turquoise sea, was a small continent peopled by a race of yellow-skinned savages. To the north was a large island of semi-barbarous black people with whom our ancestors carried on considerable commerce. These blacks were rich in minerals and precious stones, and our people tried to civilize them, but they were not successful past a certain point. To the west of Atlanthi was an archipelago of volcanic formation. It was in the crater of an extinct volcano on the largest of these islands that Valis built the pyramid.

"For many generations before the disaster, the people of Atlanthi had known the secret of silver power. Every mechanical convenience was theirs. Science was perfected to a high degree and their mode of life was changed. A race emancipated from physical toil, they knew not how to use their suddenly-acquired leisure. Decadence was comparatively rapid, and during the reign of the last Nomani there was but one true scientist.

"That scientist was Valis the Wise; savior of our race.

"One evening, as he was scanning the heavens with his large electroscope, he discovered a strange body in the constellation Tani (Scorpio). For days he studied this stranger; weighed it and plotted its course, then published to the world an amazing statement. This wanderer, which he called Tanina, was falling toward our sun, and in less than ten years would pass perilously close to, if it did not actually collide with Toltepec! Valis had seen the approach of calamity and tried to warn the people, but they, pleasure-mad worshippers of the sun, only scoffed at him and out of Atlanthi's countless millions, less than ten thousand followed his leadership, gathered up their wealth and started construction of the pyramid.

"Wo-Atlanthi was completed barely in time. The great entrance was sealed and the occupants of the pyramid were industriously arranging their new quarters when the day of chaos dawned. Valis and his Council sat in the observation room at the tip of the tower. Placid blue seas and serene, bluer sky could be seen through telescopic ports that ringed the room. The thought of disaster seemed remote, unreal. An audiview unit tuned to the news service of the world blared forth items of routine interest. The announcer read the latest report on Tanina. This long-dead nucleus of a burned-out sun had for several days loomed larger and larger in the firmament until it could now be seen during the daylight hours, but scientists had definitely determined that it would not fall into the sun. Furthermore, it had sufficient speed to form a planetary orbit just within that of Quintepec (Mercury). In fact, Nomani had already issued a Royal proclamation designating the newcomer as Ti-Quintepec! Of course the wanderer would of necessity pass fairly close to Toltepec, but no disturbance greater than a violent storm was expected. What, then, of that great alarmist, Valis? A good joke, indeed, when he and his followers slunk from their hiding! Such blasphemy. As if anyone could hide from the wrath of Ra, should the Gods choose to show their might! Verily, Nomani was a lenient Emperor, else long before, he would have condemned to death those sacrilegious scoffers.

" 'Ah, the poor misguided fools,' mourned Valis sadly, when the audiview announcer had turned to other subjects. 'They call themselves scientists, yet they are blind. Long have I known that a collision will not occur. But Tanina will not pass Toltepec and establish an orbit around the sun. She will be captured by Toltepec, rather, and become our satellite. Her gravity will agitate our seas, thereby wreaking untold havoc. Our atmosphere will be disturbed and gigantic storms will rage. Starvation and pestilence will be Atlanthi's bitter lot. Woe is Atlanthi! I see her beautiful cities buried beneath the angry waters, her civilization lost; gone forever, because her people, blinded by their worship of Ra, our own small sun, could not see the infinite manifestation of Life, the Great Source of Life, who endowed us with reason and wisdom as our only protection against Death. Too late. Our fair world is doomed. Woe is Atlanthi!'

"That was the Lamentation of Valis," continued Zahna. "It formed the basis for a new religion. Ra was completely abandoned by the Refugees and in his place the Universal God of Life was worshipped, and although this took place ages in the past, the Great Source of Life is still our Deity. Because it so influenced the course of our civilization, this Lamentation is memorized at an early age, by each child of Li-Atlanthi.

"To the wisdom and foresight of Valis, we of today owe our very existence, for his very prophecy was fulfilled. Mid-day saw Tanina's first passing, and her closest proximity was ten Toltepec diameters. She swung far outward and seemed about to continue on her course, in which case she would have plunged into Ra, for Toltepec's attraction had slowed her speed somewhat, and deflected her from her path. Breathlessly, the world watched while she hesitated, then reluctantly turned back and again sped past, this time a little farther away and at slightly less speed. Again she hesitated before the back swing that closed her orbit. The world rejoiced, for her speed was sufficient and her elliptic course would gradually smooth out.

"Toltepec had acquired a moon!

"But the people's joy was of short duration. Nomani had proclaimed a holiday for feasting and thanksgiving to Ra, and the day of festival proved to be the day of doom. In the hot, still dawn the whole world was hushed, expectant; troubled by an intangible menace that hung in the motionless air. Ra struggled slowly above the horizon and shone feebly through a stifling red haze which hung over land and sea like a pall of death. It was a lull; a brief interval, during which the Elements gathered their forces and prepared to strike their blow.

"First, out of nowhere, the wind came; a terrific, devastating gale that swept the world and left ruin and destruction in its wake. Then came the tides. Mountainous waves of water, drawn outward by Tanina's unaccustomed attraction, left the seas and, in the teeth of the mighty wind, surged over the land. Toltepec trembled and shook. Volcanos sprang into being only to be submerged beneath the rising waters, where they exploded with a rending fury that caused the planet's thin, outer crust to writhe in mortal agony. Then for days and days the rain fell. Rain in an endless torrent that finally stilled the wind and quieted the angry raging of the seas, but when once again Ra showed through the rifting clouds, Atlanthi was gone. Poseidon had claimed her; all the land had settled beneath the turbulent waters and the world of mankind was no more. Of all man's countless works, but one remained. Valis had built wisely and well; the pyramid withstood the shaking and battering of the elemental siege, and the Refugees survived. The first tidal wave had filled their crater to its rim, but with heroic calm, they watched the water rise until their instruments showed them to be far beneath the surface. Years passed, but the water showed no signs of abating and the Refugees became restless, yearning for a sight of land and the cheerful rays of Ra.

"Tirelessly, Valis worked at their problem. Power and materials he had in plenty. The big entrance chamber at the base of the pyramid was fashioned into a water-lock and he dispatched to the surface a small craft designed to navigate beneath the water or in the air. Three times the little vessel circled the planet without finding land. Tiny islands of barren, sea-worn rock were scattered over the globe, but of habitable land they found not a trace.

"But Valis was not discouraged. He designed and built another ship, the first ship in the history of mankind, designed to navigate astral space. In this small projectile, an intrepid crew of three men explored the solar system. Quintepec was too near the sun and the outer planets were too far. Guantepec possessed too little oxygen and Tanina, the newcomer, was cold and dead. Of all Ra's large family, only Altepec was found habitable. Here, a large, fertile continent was discovered. Gravity, temperature and atmosphere all proved to be ideal. Therefore, when the explorers returned to Wo-Atlanthi, Valis caused nine huge ships to be built. Only eight of these ships reached Altepec. The one that held most of the domestic animals and a large number of household servants, black and yellow-skinned savages, though first through the lock and manned by an efficient crew of Atlanthians, was never seen again. Valis thought it probable that the superstitious blacks, terrorized by the prospect of leaving Toltepec, revolted and forced the crew on a barren island.

"That was how our ancestors traded worlds," concluded Zahna. "When the eight space ships arrived here, the Refugees founded Li-Atlanthi, which through the ages, has grown until it now encompasses the entire continent. Kings and Emperors were abolished in the new city. Valis and his Council, the commanders of the eight space ships, inaugurated the form of government that is still adhered to, and until the selection of Avor, vacancies in the Council were fillled by competitive elimination. Avor is the first Reis that ever successfully gained dominance over the Council."

"But if the Council is chosen by selection, how could Avor control it?" asked Dan.

"Avor is a very resourceful schemer," replied Zahna. "Since his appointment as Reis, he has gradually gained control of our rapidly-dwindling surplus of silver and has corrupted or replaced, one by one, all the Councillors except Jon. That is why Jon is in prison now. Avor has long suspected the truth; that my father directs the activities of the Loyalists, a secret order which was originated to combat Avor's fast-growing power. Until post-diurnal (yesterday), Jon managed, through guileful strategy, to retain his place on the Council, but when Avor revealed his latest plot, to loot your world of its silver, Jon openly protested. Naturally, his protest was in vain, though somehow, in some way, Avor must be kept from visiting Toltepec. Not only for the sake of your people, but our own, as well, for if his plan is successful, he will be invincible. He will return to Atlanthi and establish himself as the monarch of two worlds. But how are we to stop him? We have even tried assassination, but he guards his precious safety too well. Jon is in the dungeon and the Loyalists, though we represent the vast majority of Atlanthi, are helpless, for, without silver, without at least a little power of our own, we can do nothing. We can only hope that your world will be able to repulse the invasion and destroy his ships."

"Why is it, White Flower, that silver is so necessary to your plans?" inquired Dan, curiously.

"Silver is our source of power. It turns all our wheels of industry. It motivates our engines; propels our ships and aircraft. It actuates our instruments and generates the rays for all our weapons."

Silver as fuel! An inkling of the answer flashed through Dan's mind: "Then you obtain power by the atomic disruption of silver?"

"Practically," assented Zahna. "The process was discovered more than fifty thousand years ago by Gazan the Second. When silver is subjected to an intricate combination of high frequency cathode rays, it is converted into electrical energy of extremely high value. The pressure is practically zero; so low, in fact, that the current must be started through the transformers by means of artificial potential. This lack of natural pressure has never been satisfactorily explained, but it is convenient, for it prevents leakage and the current is drawn from the gathering plate only as required by the transformers."

"But do not the cathode rays used for combustion, together with the inevitable power-loss, consume the greater portion of energy generated?" objected Dan.

"That is astute reasoning, Dan-Sheri-Dan," smiled the girl. "Your logic is sound, and holds true with every substance but silver, which requires the activating rays only at the beginning of the process."

Dan nodded. "Boy, what an idea!" he enthused. "As I understand it, the power of a generator would depend wholly upon the amount of silver activated and the rate of combustion."

"No," Zahna corrected him, "combustion is spontaneous, and the total power is always available. Only the life of the generator depends upon the amount of silver actuated, which is determined by the load it is destined to carry. In other words, a generator, designed to furnish power to a single building for a hundred years, could be made to furnish power to a hundred buildings, but it would only do so for a single year."

"I see," said Dan. "But doesn't this method require a pretty nearly inexhaustible supply of silver?"

"No, silver is one of the most economical fuels you could well imagine. For example, the generator in the pyramid of Wo-Atlanthi required a sphere of silver as large in diameter as the height of a small man, which was calculated to furnish all the power for its ten thousand inhabitants for a period of fifty thousand years. No, as a source of power, silver has no equal. For years Jon has worked, here in our hidden laboratory, trying to find a satisfactory substitute. But this was not to be; neither can we make it. Silver jealously guards the secret of its atomic structure, and remains one of the few substances we cannot produce by transmutation. And Oh, how we need it! Only a small amount, properly distributed among the Faithful, and we would subdue Avor, that atavism, that throwback to the days of kings and oppression."

WHEN Zahna said farewell to Dan, she promised to call him again at the end of eight octaves (nearly eleven hours). Dan was reluctant to let her go, but he was tired, himself, and knew she must have been, for he had kept her talking for several hours—hours which Dan had found highly instructive. After describing the silver generator, Zahna had told of Jon's many new discoveries during his years of experimenting. Discoveries and inventions he had kept strictly secret, hoping to use them for the furtherance of the Loyalist cause. Paramount among these were the magnetic shield for the blue ray carrier beam and the microdial. This latter was a miniature audiview projector, and although it was dependent upon the laboratory carrier beam and had no visual unit, he found it very useful for private communication, particularly now that he was in prison. It was tiny; could be worn beneath the tunic, and through it he was able to keep in touch with Zahna.

CHAPTER V

The Silver Atom

STANDING just inside the entrance to the third level, Dan closed the door and as the stone slab slid down out of the wall, he smiled grimly at the glassite switch embedded in its inner surface. This door, which he had originally opened from the lift-well, and which he had had no occasion to close since, held the key to the pyramid. No wonder he had not been able to find it!

He snapped the little switch over and watched a four-foot section of the stone floor sink a few inches and slide to one side, revealing a stair well. Casting the rays of his flashlight before him, Dan descended the twenty-odd steps, through an open doorway and into a place of humming activity. Flickering shadows were cast by an intermittent blue, flashing from a bank of vacuum tubes that surmounted a rectangular black box, from which the humming seemed to come. Dan eyed the thick cables leading from the sides of the box and into the wall behind and immediately understood. This box and its attendant battery of tubes was undoubtedly one of the power transformers described by Zahna.

Although intensely interested, Dan did not tarry for more than a cursory glance around the room. In the wall at one side of the transformer was the grilled aperture which he knew opened into a small passenger escalator shaft that pierced the pyramid from top to bottom. The large freight elevator, he knew, reached only to the level below this, the topmost room in the pyramid.

Dan's destination was the bottom, and as he descended in the escalator cage, he counted sixty-four levels. Zahna had said that the huge structure was not a true pyramid, but a cone, tapering to a point at the top, where it was surmounted by the slender spire of the tower. He found the bottom level to be fully five hundred feet in diameter; one vast, circular room, with a ceiling of domed, octagonal segments some twenty feet across, each segment being supported by four massive columns, and each domed section containing its own lighting system, controlled either by local switches in the columns, or from a central panel in the wall between the elevators.

The section directly behind the elevators was enclosed from floor to ceiling by an ornamental wrought-iron grille that apparently had no opening, but the ring of massive transformers just inside did not completely hide the ten-foot cube of purple-tinged glassite in the center. This cube, surrounded by a pulsing glow of violet light, Dan immediately perceived to be the big generator. It was almost unbelievable that this comparative midget could be capable of furnishing as much power as any one of New York's numerous, gigantic substations—and that for tens of thousands of years, without attendance or interruption!

For hours, Dan wandered through the labyrinthine maze of pillars, marveling anew at each discovery. One section of the vast space was devoted to the storage of miscellaneous supplies of every conceivable kind. Another section contained metals. In orderly stacks on the floor and on wide shelves around the columns, were bars, rods and ingots of pure silver, steel, glassite and alloys. There were labelled containers of strange liquids and chemicals. There were queer vessels and vases; queerer costumes and rolls of light weight, metallic fabric. There were odd-shaped, multiple-element bulbs and tubes. There were rolls and rolls of silver wire, some of which was insulated with flexible glassite, as well as countless other things too numerous to mention.

And miracle of miracles! Near the wall in the east quadrant, Dan found a perfectly-equipped laboratory, foundry and machine shop. And there were tools; lathes, milling machines and drill presses! Long benches were piled high with a variety of apparatus, some of which was familiar in aspect and some that was strange to him. He finally turned from the benches and surveyed the wide, arched entrance to the water lock.

It was then that he saw the space ship, the *Silver Atom.*

He named it later; not alone from its method of propulsion, but from its satiny, shimmering finish, as well. Stretched along an open areaway to the south of the water-lock, it was almost hidden in shadow, and Dan walked over and switched on the lights in the dome above it. It was shaped like a torpedo, fully fifty feet long and twenty feet diameter at its greatest cross-section. Its outer wall was made entirely of glassite—that extremely versatile Atlanthian alloy, which Sheridan later discovered was as tough as finest tungsten, could be made either opaque or transparent and had a melting point higher than that of pure quartz.

Another unique feature of this queer metal was its weight. Although considerably more dense than lead, and a perfect non-conductor of heat, the application of an electrical current of a certain frequency served to lessen its weight, and by increasing the strength of the current to and beyond the point of equalization, the material was actually repelled by gravity! The ship's propulsion method was therefore made readily apparent, when Zahna explained all this to Dan, later on. The power of gravitation furnished the chief motive force. The stubby fins, projecting fore and aft, furnished ample steering surfaces within an atmosphere, while maneuvers in space were accomplished by atomic blast from numerous little exhaust ports that studded the ship's outer wall at various points of vantage.

But when Dan first saw the ship, he knew nothing of its capabilities; he only knew that without doubt or question, he was viewing the little scout ship Valis had sent out to explore space thirty thousand years ago! After serving its purpose, it had been abandoned when the Refugees left the pyramid.

Just behind the ship's rounded nose was a circular entrance port which could be sealed by raising the foot-thick slab of glassite that was hinged downward to form a convenient ramp. Dan climbed up and looked through the port into a room which, with the exception of a level, iron floor, some ten feet across, was a perfect sphere of glassite sixteen feet in diameter. Puzzled at first, Dan finally concluded that this round cabin was probably pivoted to the outer shell and free to turn in any direction. He saw how desirable this feature would be when the ship was "taking off," as the floor would automatically swing back into the line of travel, eliminating any possibility of its occupants being thrown off balance.

In the soft light filtering through the walls from outside, Dan surveyed the contents of the cabin. A round table was built into the center of the floor, and behind the table was a metal replica of the stone couch in the tower. A half-dozen large, round ports of transparent glassite pierced the wall in the forward part of the cabin, and as the outer wall at the nose of the craft was also transparent, an unobstructed view ahead was afforded. The remainder of the hull was built of the ivory-tinged, translucent glassite that gave it its lustrous, silvery finish. Innumerable enclosed cupboards for the storage of supplies occupied most of the wall space inside the cabin, and the generator, air machine and power plant, accessible through a small trapdoor in the floor, was located amidships, just behind the cabin.

Directly in front of the center observation port, Dan saw a metal chair fastened to the floor before what was obviously the control board. He ventured in and sat down in the chair to study the inscriptions carved beneath the various instruments. Suddenly, he noticed the familiar arrangement of a small sub-panel to the left. It looked like an audiview unit! Sure enough! There was the little crystal, and embedded in the wall nearby was a two-foot strip of the silvery screen!

The audiview unit quite naturally caused Zahna's face to frame itself in Dan's mind's eye. Zahna, the White Flower of Li-Atlanthi; the most beautiful, the most desirable and altogether lovely woman he had ever seen! If only they were on the same world! If only millions of miles of space did not separate them! If only he could see her in actual life; but wait——!

Dan was conscious of a tingling little thrill at the unprecedented daring of his thought. Did he have the courage to actually undertake so mad a venture? Why not? Without doubt, it would be the simplest way to settle everything. If the Loyalists were supplied with the necessary silver, they could settle their differences with Avor at home. And last, but not the least, he would see Zahna. Furthermore, Zahna and Jon together, could tell him the things to do. After all, was it so mad, so absurd? He saw no reason to think so.

Dan had decided to fly the *Silver Atom* to Li-Atlanthi!

With Dan, to think was to act. Returning to the tower, he gathered up the supplies he would need to take with him and hauled them down to the base of the pyramid, where he stowed them aboard the *Silver Atom.*

A GRACEFUL monoplane hummed steadily into the northeast. Jimmie Burns, its pilot and sole occupant, peered through the whirling propeller blades at a rugged notch in the mountains. He had just straightened out for the last leg of his flight, when an unusual and wholly unexpected phenomenon caught his attention.

From the horizon ahead, rose an arc of pulsing light which climbed with constant acceleration to an incalculable height, poised for an instant, and in a burst of pale radiance, rocketed into the west at an appalling speed, to quickly vanish; lost in a tangle of glittering stars.

This unique demonstration apparently had originated in the whereabouts of his destination and Jimmie was puzzled and a little anxious. He opened wide the throttle and when dawn broke an hour later, he circled over Lost Lake, landed and scudded swiftly up to the north shore.

The large cove was bare. He made a complete circuit of the lake and his anxiety turned to dismay. Not a sign of camp could he find. Turning his eyes to the center of the lake, he received another shock. The protruding dome of the tower had vanished! Perplexed, Jimmie brushed a hand across his eyes and inspected the surrounding scenery. There were the same notched walls, the same ragged outline of towering peaks in the distance. Yes, surely this was Lost Lake, but where was Dan, the camp equipment—and the dome? Intuitively, Jimmie felt that Dan's unaccountable absence was connected, somehow, with the mysterious disappearance of the dome. Then, too, there was that disturbing flash of light to consider. Something had happened; he had returned too late!

Where could Dan be? How should he best start searching for him? There seemed to be no starting point; nothing to indicate that Dan had ever camped at the Lake. Presently Jimmie's roving gaze fastened upon a small cylinder of polished metal, floating in the water a few yards away. He maneuvered around and fished it out. Unscrewing the cap, he drew out a bundle of thin, metallic sheets which were carefully wrapped up—Dan Sheridan's diary!

When Jimmie finished reading the contents of that diary, the mystery was a mystery no longer. The vanished tower was explained, as was the arc of pulsing light that had so puzzled him just before dawn. That light, he now knew, was the atomic blast from the exhaust ports of the *Silver Atom,* carrying Dan Sheridan away, into the void of infinite space, to a faraway world where Zahna and the Faithful of Li-Atlanthi waited!

Jimmie Burns' question was answered and his search abandoned, but he was far from satisfied about the eventual fate of his friend.

CHAPTER VI

A Year Later

BACK in the little university town that was home to Jimmie Burns, his carefully-framed explanation of Sheridan's absence was accepted without question, and the months dragged by until again it was vacation time. Again the campus was deserted. Students and faculty alike had drifted away for the summer. But Burns was completely at a loss. He couldn't seem to decide where he wanted to go, so he lingered on at the cottage, shunning, from day to day, the necessity of making plans for a vacation that would not include Dan. However, he must soon decide to do something; he spent altogether too much time thinking about the probable fate of his friend, perhaps drifting helplessly among the stars or crashing at terrific speed into some blazing sun. Even though he had arrived safely at his destination, was he not just as effectively lost to his friends on Earth?

Jimmie's mind was running on these lines upon a balmy spring evening after dinner, as he sat alone in the cozy little study where he and Dan had spent so many happy hours together. An open book was on the table before him, but his mind wandered and his eyes were fixed vacantly upon the door.

The door opened noiselessly and an ethereal vision was framed therein. A girl wrapped in a shimmering white robe smiled at him from an aura of pale gold hair, and eyes of midnight black twinkled at him from beneath a high, wide brow. No, he was not dreaming, for the vision laughed—a low, throaty laugh pleasant to hear—and wasn't someone standing behind the girl? Someone who looked like—it was! Dan Sheridan!

Jimmie was so overcome with surprise that he could only sit and stare, while the girl glided into the room and stood beside the door. Sheridan walked in, his face wreathed in smiles at his friend's incredulous expression.

"No, Jim, you're not seeing things," he laughed, "we're here in person." And when the handshaking and backslapping had subsided, Dan turned to the girl, who had thrown aside her robe, revealing the jewel-tipped, short-skirted costume of Li-Atlanthi.

"Darling, you don't need to be told that this is Jimmie. Jimmie, this is Zahna. We are on our honeymoon trip—we've been married just three weeks, Earth-time."

A few minutes later, Zahna was comfortably curled up on one end of the divan. Dan sat at the other end, while across from him in the wide armchair, was Jimmie. The men had their pipes going and Zahna's bright gaze shifted from one to the other as they talked. She spoke but seldom, although her English was almost flawless. Dan had told Jimmie that they came from Li-Atlanthi in the new space yacht *Toltan Queen,* a wedding present from Jon. In charge of Tantl, its pilot, they had left the ship hidden in a rocky gorge some hundred miles to the west, making their way to the cottage in a little air car.

Very little persuasion had been necessary for the newlyweds to get Jimmie's promise to return with them to Li-Atlanthi. In fact, it was a perfect solution to his vacation problem and his packing was already done!

"Fine!" exclaimed Dan. "Then we can leave before daybreak in the morning!"

"What's all the hurry," puzzled Jimmie. "Do you think so little of your native planet that you can't stay for a few days or weeks—show Zahna around a little?"

"Gosh, Jim, I sure would like to, the best in the world. But you see, the Council is still a little dubious about the advisability of commerce between the two planets just yet, and I had to make a solemn pledge of secrecy before they would let us come. The *Toltan Queen* is a good-sized ship and harder to hide than you might think, so the sooner we get away, the less likely we are to be seen."

"Well," conceded Jimmie, reluctantly. "But I promise you one thing: I positively refuse to stir from this room until you have told me all about your trip in the *Silver Atom.*"

"There isn't much to tell," laughed Dan. "As soon as I found the *Silver Atom* down there in the Pyramid, I got the idea of flying it to Altepec, so I rushed up to the tower and got my things together and carried them down to the ship. I set the ship's audiview dials to Zahna's signal and while waiting for her to call me, I finished up my diary, which you say you found.

"When I first outlined my plan to Zahna, I think she was a little dubious, but she dug up some old records, that contained drawings and specifications of the ship. From these charts I made a few minor repairs, recharged the generators and familiarized myself with the controls.

"As I know little or nothing of astronomy, the question of navigation troubled us until just before I started, when I was struck with the bright idea of using Zahna's radio beam for a compass. It worked like a charm. As long as her image showed on my audiview screen, I knew I was within the beam, and all I had to do was to follow it to its source. It so happened that Venus and the Earth were most favorably situated or I probably wouldn't have had such an easy time of it. But for that matter, had the two planets not been in opposition, Jon and I couldn't have found each other in the first place. As you probably know, there is only about one month of every seven during which the Earth and Venus are relatively near neighbors on the same side of the sun. My route was almost a straight line in the plane of the ecliptic; the shortest course, but the most hazardous, Tantl claims, on account of the 'cosmic trash'—asteroids, meteors and so forth. Venus in its orbit was meeting us.

"BUT Zahna and the luck of the Irish were with me, and I got through all in one piece, though without Zahna's help I could never have made it. Traveling as I did, half the trip at a constant acceleration of almost one gravity, then decelerating at the same rate, you can readily understand that along about midway I was going pretty fast. So fast, that a very few minutes off my course might have been disastrous. Once, while I was asleep, the ship was suddenly deflected from her course by the meteor detectors dodging a body too heavy to be repelled. Zahna, watching while I slept, was on the lookout for just such a contingency as this, and when my image faded from her screen, she swung the beam until she regained connection, when she awoke me and I corrected the course.

"During the otherwise uneventful voyage, Zahna had me sketch a large variety of maps which I studied until I was fairly familiar with the physical characteristics of the Continent and certain landmarks identifying a number of the landing terraces on the roof of the city.

"We timed my arrival perfectly. In a little more than five Earth days after leaving the pyramid, I pushed the *Silver Atom* down through the clouds and settled quickly to rest on the Thule Terrace, which is directly above the entrance to the laboratory. Before landing, I had to circle the planet several times to check my speed to atmospheric figures, and it was unavoidable that one of Avor's men should pick me up on his audiview. While circling at such close range, Zahna could not always keep the light beam of the insulated carrier upon me.

"Well, to make a long story short, a big bunch of Loyalists were waiting for me, and when I landed my cargo of silver, it was quickly unloaded and dumped into a pneumatic tube and conveyed down to the laboratory. In just about as long as it takes to tell it, workmen in the laboratory had charged a huge generator and hidden ray projectors all over the Continent were supplied with the essential power.

"Avor's attack, incurred by my rather spectacular arrival, was easily repulsed, and then began the shortest, but most terrible battle I hope ever again to witness. The whole darned continent seemed to burst into flame all at once. Huge buildings would suddenly glow a bright red, then burst into blinding white hells of unbearable heat and melt away. It was all over in ten minutes. The Loyalists had planned their attack with consummate skill and when the fireworks ceased, every stronghold of the Royalists had been destroyed and the blot upon Atlanthi's political record was eradicated.

"And—Oh, yes—the first thing we did was to remove Jon from the dungeon, which was situated below the Castle, or main Administration Building. This was necessary because the Castle, naturally, was the main bone of contention and the first building destroyed.

"Political crookedness is not tolerated in Li-Atlanthi, and within three days, every member of Avor's régime had been hunted down and summarily executed. A new Council was selected, with Jon as the Reis. Li-Atlanthi's millions are again peaceful and content, and everything is rosy. For some reason, I seem to have a pretty big pull in the big city. Jon has put me at the head of a new department he has created, and all in all, life looks very bright for me in my adopted world."

At this point, Zahna contributed to the narration. With an imperious gesture of mock severity, she shook a slender, delicately tapered forefinger at Dan and said:

"My Danny, that is not all the story. You are much too modest, and have left out the most important parts. Why do not you tell how you so cleverly outwitted the battlecar and slipped down to the Terrace when we thought all was lost; how with your noisy weapon you killed the spy who would have blown up our generators, and how, single-handed you cut your way through and rescued Jon while they were trying to spirit him away to hold as hostage. And as for——"

"Enough, White Flower, enough!" cried Dan, laughing. "If you must tell pretty tales about me, get Jimmie in a corner all alone sometime." And Sheridan effectively smothered Zahna's further attempts to talk by gathering her bodily into his arms and showering her pretty face with kisses.

"You win, Danny," she finally submitted, but when Sheridan put her down she turned to Burns and said, gravely: "My handsome Toltan is much beloved in Li-Atlanthi, Jimmie, and rightfully. He is hailed as Quetzal-tlal, and some day soon I shall tell you how his bravery and quick wits won for him——"

"Now, Angel," cautioned Dan, with another threatening motion. Then, glancing at his wrist watch, his expression changed. "We'll have lots of time to talk on the way home. It's about time to leave now. Ready, Jim?"

At a nod from Burns, Dan picked up a suitcase and with one arm about Zahna's slender waist, led the way down the hall and out into the darkness at the rear of the cottage. Our three friends entered a shed nearby, from which they presently emerged in the air car, a vehicle closely resembling an automobile.

Noiselessly, the car glided down the driveway and into a side street. A small searchlight flashed on, illuminating the road ahead. As the little car gathered speed, stubby wings sprouted from its sides and it took to the air, soon to be swallowed by the darkness. An hour later, in the blue-black sky to the west, a pinpoint of pulsing light could have been seen to rise up—up and outward—into the reaches of space.

The *Toltan Queen* had made her first voyage to Earth and now was homeward bound.

THE END.

The Lemurian Documents

No. 5: The Sacred Cloak of Feathers

By J. Lewis Burt

(*Continued from page* 345)

At Jason's request a flier was dispatched to Rapani with a message to the emperor announcing the complete success of the mission.

The warship, whose business it was to patrol that part of the ocean, accompanied them for the remainder of the voyage, the monotony of the trip being broken by occasional visits between the two vessels.

A day's run from Rapani they were met by a squadron of cruisers and a large assortment of private yachts, and escorted with full ceremony to the harbor.

As the ship came to anchor at the landing stage the emperor and empress themselves stepped on board and, at their request, the boat was put out again to the middle of the harbor. Here in comparative quiet, they received a full account of the voyage, and approved it all.

The emperor was almost apologetic in speaking of the triumphal procession to follow. "I know you fellows will hate it, but we all have to pay the price of our fame," was his whimsical comment.

The fleet had arrived just after sunset, so the ceremonials were arranged to take place the next day, the emperor and empress remaining on board the *Arcgu* all night.

Early next morning the procession moved slowly from the dock. At the sight of their beloved emperor, arrayed at last in the sacred Cloak, the people went frantic. The excitement exceeded anything ever before seen. Not even had the triumphal progress of Dyd-Allu equalled it in enthusiasm.

Honors and rewards were showered on the travelers, as, with celebrations and rejoicings, the people of the whole empire welcomed back their sacred symbol of world supremacy.

Long may the symbol remain as a mark of the actual supremacy of our great empire. May our rule continue to show the world that true greatness shall ever go hand in hand with justice, mercy and generosity.

May the Holy Gods grant our beloved Emperor a long and happy life in which to wear the symbol of power, the Royal Cloak of Sacred Feathers.

THE END

What Do You Know?

READERS of AMAZING STORIES have frequently commented upon the fact that there is more actual knowledge to be gained through reading its pages than from many a text-book. Moreover, most of the stories are written in a popular vein, making it possible for anyone to grasp important facts.

The questions which we give below are all answered on the pages as listed at the end of the questions. Please see if you can answer the questions without looking for the answer, and see how well you check up on your general knowledge of science.

1. What distinction would you draw between the words "cosmogony" and "cosmognomy?" (See page 295.)
2. What is the general tendency of the motion of cosmic bodies? (See page 295.)
3. How long does it take the celebrated nebula in Andromeda to make a single rotation? (See page 295.)
4. What is its peripheral speed? (See page 295.)
5. What is solenoid transmission? (See page 299.)
6. In solenoid transmission should there be propelling machinery in the car? (See page 300.)
7. Give a description of the relation of mental and physical time? (See page 302.)
8. Describe Callisto, its place in the heavens and size? (See page 355.)
9. What may we take as the meaning of its name? (See page 355.)
10. What island country has a famous cloak of feathers and what is its value? (See page 339.)
11. What planet could have its name derived from its second place from the sun? (See page 360.)
12. What is the approximate length of Venus' period of rotation around the sun? (See page 360.)
13. What happens to the mass of a body moving with the speed of light? (See page 376.)
14. What would be the order of the length of a body moving faster than light? (See page 376.)
15. What is the distinction between an imaginary and a negative quantity? (See page 376.)

Omega

By Amelia Reynolds Long

HYPNOTISM, according to some psychologists, is an established science and is capable of far-reaching effects. We do not know, for the truth of these assertions has certainly not been proved. For those who are seriously interested in this branch, our new author offers a tale of unusual interest.

Illustrated by MOREY

I, DOCTOR MICHAEL CLAYBRIDGE, living in the year 1926, have listened to a description of the end of the world from the lips of the man who witnessed it; the last man of the human race. That this is possible, or that I am not insane, I cannot ask you to believe: I can only offer you the facts.

For a long time my friend, Prof. Mortimer, had been experimenting with what he termed his theory of mental time; but I had known nothing of the nature of this theory until one day, in response to his request, I visited him at his laboratory. I found him bending over a young medical student, whom he had put into a state of hypnotic trance.

"A test of my theory, Claybridge," he whispered excitedly as I entered. "A moment ago I suggested to Bennet that this was the date of the battle of Waterloo. For him, it accordingly became so; for he described for me—and in French, mind you—a part of the battle at which he was present!"

"Present!" I exclaimed. "You mean that he is a reincarnation of—?"

"No, no," he interrupted impatiently. "You forget—or rather, you do not know—that time is a circle, all of whose parts are coexistent. By hypnotic suggestion, I moved his materiality line until it became tangent with the Waterloo segment of the circle. Whether in physical time the two have ever touched before, is of little matter."

Of course I understood nothing of this; but before I could ask for an explanation, he had turned back to his patient.

"Attila, the Hun, is sweeping down upon Rome with his hordes," he said. "You are with them. Tell me what you see."

For a moment, nothing happened; then before our very eyes, the young man's features seemed to undergo a change. His nose grew beak-shaped, while his forehead acquired a backward slant. His pale face became ruddy, and his eyes changed from brown to grey-green. Suddenly he flung out his arms; and there burst from his lips a torrent of sounds of which Mortimer and I could make nothing except that they bore a strong resemblance to the old Teutonic languages.

Mortimer let this continue for a moment or so before he recalled the boy from his trance. To my surprise, young Bennet was, upon awakening, quite his usual self without any trace of Hun feature. He spoke, however, of a feeling of weariness.

"Now," I said when Mortimer and I were alone, "would you mind telling me what it is all about?"

He smiled. "Time," he began, "is of two kinds; mental and physical. Of these, mental is the real; physical the unreal; or, we might say, the instrument used to measure the real. And its measurement is gauged by intensity, not length."

"You mean—?" I asked, not sure that I followed him correctly.

"That real time is measured by the intensity with which we live it," he answered. "Thus a minute of mental time may, by the standards devised by man, be three hours deep, because we have lived it intensely; while an eon of mental time may embrace but half a day physically for reverse reasons."

" 'A thousand years in Thy sight are but as yesterday when it is past, and as a watch in the night,' " I murmured.

"Exactly," he said, "except that in mental time there is neither past nor future, but only a continuous present. Mental time, as I remarked a while ago, is an infinite circle with materiality a line running tangent to it. The point of tangency interprets it to the physical senses, and so creates what we call physical time. Since a line can be tangent to a circle at only one point, our physical existence is single. If it were possible, as some day it may be, to make the line bisect the circle, we shall lead two existences simultaneously.

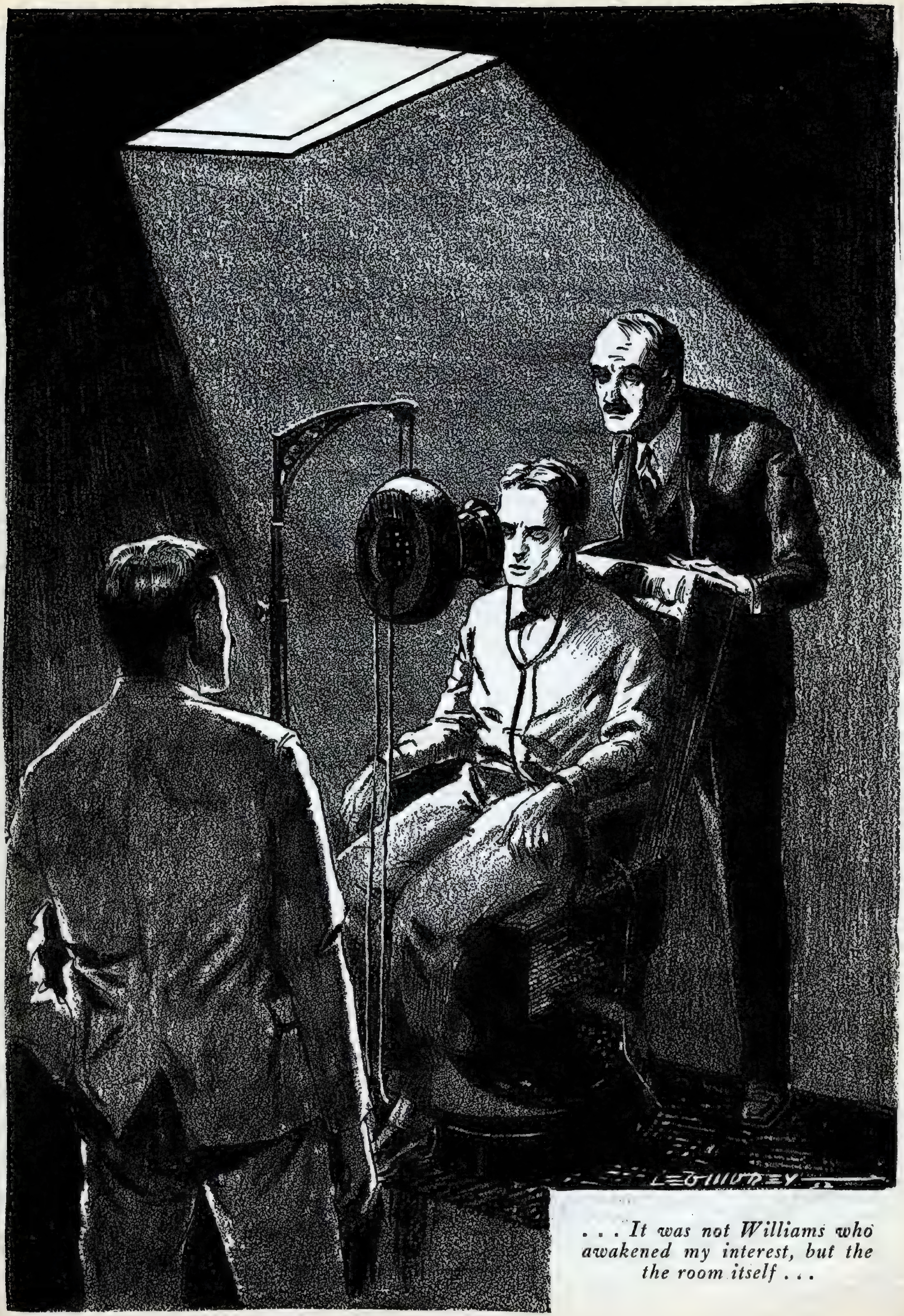
"I have proven, as you saw in the case of Bennet just now, that the point of tangency between the time circle and the materiality line can be changed by hypnotic suggestion. An entirely satisfactory experiment, you must admit; and yet," he became suddenly dejected, "as far as the world is concerned, it proves absolutely nothing."

"Why not?" I asked. "Couldn't others witness such a demonstration as well as I?"

"And deem it a very nice proof of reincarnation," he shrugged. "No, Claybridge, it won't do. There is but one proof the world would consider; the transfer of a man's consciousness to the future."

"Cannot that be done?" I queried.

"Yes," he said. "But there is connected with it an



. . . It was not Williams who awakened my interest, but the the room itself . . .

element of danger. Mental status has a strong effect upon the physical being, as was witnessed by Bennet's reversion to the Hun type. Had I kept him in the hypnotic state for too long a period, the Teutonic cast of features would not have vanished with his awakening. What changes a projection into the future would bring, I cannot say; and for that reason he is naturally unwilling that I experiment upon him in that direction."

He strode up and down the floor of his laboratory as he talked. His head was slumped forward upon his breast, as if heavy with the weight of thought.

"Then satisfactory proof is impossible?" I asked. "You can never hope to convince the world?"

He stopped with a suddenness that was startling, and his head went up with a jerk. "No!" he cried. "I have not given up! I must have a subject for my experiments, and I shall proceed to find one."

This determined statement did not particularly impress me at the time, nor, for that matter, did the time-theory itself. Both were recalled to me a week or so later, when, in answer to his summons, I again visited Mortimer at the laboratory, and he thrust a newspaper into my hands, pointing to an item among the want ads.

"Wanted—" I read, "A subject for hypnotic experiment. $5.000 for the right man. Apply Pro. Alex Mortimer, Mortimer Laboratories, City."

"Surely," I exclaimed, "you do not expect to receive an answer to that?"

"On the contrary," he smiled, "I have received no less than a dozen answers. From them I chose the one who is most likely to prove the best subject. He will be here in a few minutes to sign the documents absolving me from any responsibility in case of accident. That is why I sent for you."

I could only stare at him.

"Of course," he went on, "I explained to him that there would be a degree of personal risk involved, but he appeared not to care. On the contrary, he seemed almost to welcome it. He—"

A knock at the door interrupted him. In response to his call, one of his assistants looked in.

"Mr. Williams is here, Professor."

"Send him in, Gable." As the assistant disappeared, Mortimer turned back to me. "My prospective subject," he explained. "He is prompt."

A thin, rather undersized man entered the room. My attention was at once drawn to his eyes, which seemed too large for his face.

"Mr. Williams, my friend, Dr. Claybridge," Mortimer introduced us. "The doctor is going to witness these articles we have to sign."

Williams acknowledged the introduction in a voice that sounded infinitely tired.

"Here are the papers," Mortimer said, pushing a few sheets of paper across the table toward him.

Williams merely glanced at them, and picked up a pen.

"Just a minute," Mortimer rang for Gable. The assistant and I witnessed the signature, and affixed our names below it.

"I am ready to begin immediately, if you like," Williams said when Gable had gone.

Mortimer eyed him reflectively for a moment. "First," he said, "there is a question I should like to ask you, Mr. Williams. You need not answer if you feel disinclined. Why are you so eager to undergo an experiment, the outcome of which even I cannot foresee?"

"If I answer that, will my answer be treated as strictly confidential?" asked Williams, casting a sidelong glance in my direction.

"Most certainly," Mortimer replied. "I speak for both myself and Dr. Claybridge." I nodded affirmation.

"Then," said Williams, "I will tell you. I welcome this experiment because, as you pointed out yesterday, there is a possibility of its resulting in my death. No, you did not say so in so many words, Prof. Mortimer, but that is the fear at the back of your mind. And why should I wish to die? Because, gentlemen, I have committed murder."

"What!" We barked out the word together.

Williams smiled wanly at our amazement. "That is rather an unusual statement; isn't it?" he asked in his tired voice. "Whom I murdered does not matter. The police will never find me out, for I was clever about it in order that my sister, to whom your $5,000, Professor, is to be paid, need not suffer from the humiliation of my arrest. But although I can escape the authorities, I cannot escape my own conscience. The knowledge that I have deliberately killed a man, even while he merited death, is becoming too much for me; and since my religion forbids suicide, I have turned to you as a possible way out. I think that is all."

We stared at him in silence. What Mortimer was thinking, I do not know. Most likely he was pondering upon the strange pyschology of human conduct. As for me, I could not help wondering in what awful, perhaps pitiable tragedy this little man had been an actor.

MORTIMER was the first to speak. When he did so, it was with no reference to what we had just heard. "Since you are ready, Mr. Williams, we will proceed with our initial experiment at once," he said. "I have arranged a special room for it, where there will be no other thought waves nor suggestions to disturb you."

He rose, and was apparently about to lead the way to this room when the telephone rang.

"Hello," he called into the transmitter. "Dr. Claybridge? Yes, he is here. Just a minute." He pushed the instrument towards me.

My hospital was on the wire. After taking the message, I hung up in disgust. "An acute case of appendicitis," I announced. "Of course I'm sorry for the poor devil, but he certainly chose an inopportune time for his attack."

"I will phone you all about the experiment," Mortimer promised as I reached for my hat. "Perhaps you can be present at the next one."

True to his promise, he rang me up that evening. "I have had wonderful success!" he cried exultantly. "So far, I have experimented only in a small way, but at that my theory has been proven beyond the possibility of doubt. And there was one most interesting feature, Claybridge. Williams told me what would be the nature of my experiment tomorrow afternoon."

"And what will it be?" I asked.

"I am to make his material consciousness tangent with the end of the world," was the astonishing answer.

"Good heavens!" I cried in spite of myself. "Shall you do it?"

"I have no choice in the matter," he replied.

"Mortimer, you fatalist! You—"

"No, no," he protested. "It is not fatalism. Can't you understand that—"

But I interrupted him. "May I be present?" I asked.

"Yes," he answered. "You will be there. Williams saw you."

I had a good mind to deliberately *not* be there, just to put a kink in his precious theory; but my curiosity was too great, and at the appointed time, I was on hand.

"I have already put Williams to sleep," Mortimer said as I came in. "He is in my especially prepared room. Come and I will show him to you."

He led me down a long hall to a door which, I knew had originally given upon a storeroom. Inserting a key in the lock, he turned it, and flung the door open.

In the room beyond, I could see Williams seated in a swivel chair. His eyes were closed and his body relaxed, as in sleep. However, it was not he that awakened my interest, but the room itself. It was windowless, with only a skylight in the ceiling to admit light and air. Aside from the chair in which Williams sat, there was no furniture save an instrument resembling an immense telephone transmitter that a crane arm held about two inches from the hypnotized man's mouth, and a set of ear phones, such as a telephone operator wears, which were attached to his ears. But strangest of all, the walls, floors, and ceiling of the room were lined with a whitish metal.

"White lead," said Mortimer, seeing my eyes upon it; "the substance least conductive of thought waves. I want the subject to be as free as possible from outside thought influences, so that when he talks with me over that telephonic device, which is connected with my laboratory, there can be no danger of his telling me any but his own experiences."

"But the skylight," I pointed out. "It is partially open."

"True," he admitted. "But thought waves, like sound waves, travel upwards and outwards; rarely, if ever, downwards. So, you see, there is little danger from the skylight."

He closed and locked the door, and we went back to the laboratory. In one corner was what looked like a radio loud speaker, while near it was a transmitter similar to the one in the room with Williams.

"I shall speak to Williams through the transmitter," explained Mortimer, "and he shall hear me by means of the ear phones. When he answers into his transmitter, we will hear him through the loud speaker."

He seated himself before the apparatus and spoke: "Williams, do you hear me?"

"I hear you." The reply came promptly, but in the heavy tones of a man talking in his sleep.

"Listen to me. You are living in the last six days of the earth. By 'days,' I do not mean periods of twenty-four hours, but such lengths of time as are meant in the first chapter of the book of Genesis. It is now the first day of the six. Tell me what you see."

After a short interval, the answer came in a strange, high key. While the words were English, they were spoken with a curious intonation that was at first difficult to understand.

"This is the year 46,812," said the voice, "or, in modern time, 43,930 A. I. C. After Interplanetary Communication. It is not well upon the earth. The Polar Ice Cap comes down almost to Newfoundland. Summer lasts but a few weeks, and then its heat is scorching. What in early time was known as the Atlantic Coastal Plain has long ago sunken into the sea. High dykes must be used to keep the water from covering the island of Manhattan, where the world's government is located. A great war has just been concluded. There are many dead to bury."

"You speak of interplanetary communication," said Mortimer. "Is the world, then, in communication with the planets?"

"In the year 2,952," came the answer, "the earth succeeded in getting into communication with Mars. Radio pictures were sent back and forth between the two worlds until they learned each other's languages; then sound communication was established. The Martians had been trying to signal the earth since the beginning of the twentieth century, but were unable to set up a system of communication because of the insufficient scientific advancement of the Earthmen.

"About a thousand years later, a message was received from Venus, which had now advanced to the earth's state of civilization, when Mars was signalled. For nearly five hundred years they had been receiving messages from both the earth and Mars, but had been unable to answer.

"A little over five thousand years later, a series of sounds was received which seemed to come from somewhere beyond Venus. Venus and Mars heard them too; but, like us, were able to make nothing of them. All three worlds broadcasted their radio pictures on the wave length corresponding to that of the mysterious sounds, but received no answer. At last Venus advanced the theory that the sounds had come from Mercury, whose inhabitants, obliged to live upon the side of their world farther from the sun, would be either entirely without sight or with eyes not sufficiently developed to see our pictures.

"Recently something dire has happened to Mars. Our last messages from her told of terrible wars and pestilences, such as we are now having upon earth. Also, her water supply was beginning to give out, due to the fact that she was obliged to use much of it in the manufacture of atmosphere. Suddenly, about fifty years ago, all messages from her ceased; and upon signalling her, we received no answer."

Mortimer covered the transmitter with his hand. "That," he said to me, "can mean only that intelligent life upon Mars had become extinct. The earth, then, can have but a few thousand years yet to go."

FOR nearly an hour longer he quizzed Williams upon conditions of the year 46,812. All the answers showed that while scientific knowledge had reached an almost incredulous stage of advancement, the race of mankind was in its twilight. Wars had killed off thousands of people, while strange, new diseases found hosts of victims daily in a race whose members were no longer physically constituted to withstand them. Worst of all, the birth rate was rapidly diminishing.

"Listen to me." Mortimer raised his voice as if to impress his invisible subject with what he was about to say. "You are now living in the second day. Tell me what you see."

There was a moment or so of silence; then the voice, keyed even higher than before, spoke again.

"I see humanity in its death-throes," it said. "Only a few scattered tribes remain to roam over the deserted continents. The cattle have begun to sicken and die; and it is unsafe to use them for food. Four thousand years ago, we took to the manufacture of artificial air, as did the Martians before us. But it is hardly worth while, for children are no longer born. We shall be the last of our race."

"Have you received no recent word from Mars?" asked Mortimer.

"None. Two years ago, at her proper season, Mars failed to appear in the heavens. As to what has become of her, we can only conjecture."

There was a horrible suggestiveness about this statement. I shuddered, and noticed that Mortimer did, also.

"The Polar Ice Cap has begun to retreat," resumed the voice. "Now it is winters that are short. Tropical plants have begun to appear in the temperate zones. The lower forms of animal life are becoming more numerous, and have begun to pursue man as man once pursued them. The days of the human race are definitely numbered. We are a band of strangers upon our own world."

"Listen to me," said Mortimer again. "It is now the third day. Describe it."

Followed the usual short interval of silence; then came the voice, fairly brittle with freezing terror.

"Why," it screamed, "do you keep me here; the last living man upon a dying planet? The world is festering with dead things. Let me be dead with them."

"Mortimer," I interrupted, "this is awful! Hasn't your experiment gone far enough?"

He pushed back his chair and rose. "Yes," he said, a bit shakily, I thought. "For the present, at least. Come; I will awaken Williams."

I followed him down the hall, and was close upon his heels, when he flung open the door of the lead-lined room, and stepped inside. Our cries of surprised alarm were simultaneous.

In the chair where we had left him sat Williams; but physically he was a different man. He had shrunken several inches in stature, while his head appeared to have grown larger, with the forehead almost bulbous in aspect. His fingers were extremely long and sensitive, but suggestive of great strength. His frame was thin to emaciation.

"Good Heavens!" I gasped. "What has happened?"

"It is an extreme case of mental influence upon matter," answered Mortimer, bending over the hypnotized man. "You remember how young Bennet's features took on the characteristics of a Hun? A similar thing, but in a much intenser degree, has happened to Williams. He has become a man of the future physically as well as mentally."

"Good Lord!" I cried. "Waken him at once! This is horrible."

"To be frank with you," said Mortimer gravely, "I am afraid to. He has been in this state much longer than I realized. To waken him too suddenly would be dangerous. It might even prove fatal."

For a moment he seemed lost in thought. Then he removed the ear phones from Williams' head, and addressed him. "Sleep," he commanded. "Sleep soundly and naturally. When you have rested sufficiently, you will awaken and be your normal self."

Shortly after this, I left Mortimer, and, although it was my day off duty, went to my hospital. How good my commonplace tonsil cases seemed after the unholy things I had just exprienced! I surprised the resident physician almost into a state of coma by putting in the remainder of the day in the hardest work possible in the free clinic; and finally went home, tired in mind and body.

I turned in early for what I deemed a well-earned rest, and fell asleep instantly. The next thing of which I was conscious was the insistent ringing of the telephone bell beside my bed.

"Hello," I cried sleepily, taking down the receiver. "Dr. Claybridge speaking."

"Claybridge, this is Mortimer," came the almost hysterical response. "For God's sake, come over to the laboratory at once!"

"What has happened?" I demanded, instantly wide awake. It would take something unusual to wring such excitement from the unemotional Mortimer.

"It's Williams," he answered. "I can't bring him back. He got awake about an hour ago, and still believes that he is living in the future. Physically, he is the same as he was when last you saw him this afternoon."

"I'll be over at once," I fairly shouted, and slammed the receiver down upon its hook. As I scrambled into my clothes, I glanced at the clock. Two fifteen. In half an hour I could reach the laboratory. What would I find waiting for me?

Mortimer was in the lead room with Williams when I arrived.

"Claybridge," he said, "I need someone else's opinion in this case. Look at him, and tell me what you think."

Williams still occupied the chair in the middle of the room. His eyes were wide open, but it was plain that he saw neither Mortimer nor me. Even when I bent over him and touched him, he gave no sign of being conscious of my presence.

"He looks as if he were suffering from some sort of catalepsy," I said, "yet his temperature and pulse are almost normal. I should say that he is still partially in a state of hypnosis."

"Then it is self-hypnosis," said Mortimer, "for I have entirely withdrawn my influence."

"Perhaps," I suggested lightly, "you have transported him irretrievably into the future."

"That," Mortimer replied, "is precisely what I fear has happened."

I stared at him dumbly.

"The only way out," he went on, "is to rehypnotize him, and finish the experiment. At its conclusion, he may return to his natural state."

I COULD not help thinking that there were certain things which it was forbidden man to know; and that Mortimer, having wantonly blundered into them, was now being made to pay the penalty. I watched him as he worked over poor Williams, straining all his energies to induce a state of hypnotic sleep. At last the glassy eyes before him closed, and his subject slept. With hands that trembled visibly, he adjusted the earphones, and we went back to the laboratory.

"Williams," Mortimer called into his transmitter, "do you hear me?"

"I hear you," replied the odiously familiar voice.

"You are now living in the fourth day. What do you see?"

"I see reptiles; great lizards that walk upon their hind legs, and birds with tiny heads and bats' wings, that build nests in the ruins of the deserted cities."

"Dinosaurs and pterodactyles!" I gasped involuntarily. "A second age of reptiles!"

"The Polar caps have retreated until there is but a small area of ice about each of the poles," continued the voice. "There are no longer any seasons; only a continuous reign of heat. The torrid zone has become uninhabitable even by the reptiles. The sea there boils. Great monsters writhe in their death agonies upon its surface. Even the northern waters are becoming heated.

"All the land is covered with rank vegetation upon which the reptiles feed. The air is fetid with it."

Mortimer interrupted: "Describe the fifth day."

After the customary interval, the voice replied. There was a sticky quality about it that reminded me of the sucking of mud at some object struggling in it.

"The reptiles are gone," it said. "I alone live upon this expiring world. Even the plant life has turned yellow and withered. The volcanoes are in terrific action. The mountains are becoming level, and soon all will be one vast plain. A thick, green slime is gathering upon the face of the waters; so that it is difficult to tell where the land with its rotting vegetation ends and the sea begins. The sky is saffron in color, like a plate of hot brass. At night a blood red moon swims drunkenly in a black sky.

"Something is happening to gravitation. For a long time I had suspected it. Today I tested it by throwing a stone into the air. I was carried several feet above the ground by the force of my action. It took the stone nearly twenty minutes to return to earth. It fell slowly, *and at an angle!*"

"An angle!" cried Mortimer.

"Yes. It was barely perceptible, but it was there. The earth's movement is slowing. Days and nights have more than doubled in length."

"What is the condition of the atmosphere?"

"A trifle rarefied, but not sufficiently so to make breathing difficult. This seems strange to me."

"That," said Mortimer to me, "is because his body is here in the twentieth century, where there is plenty of air. The air at the stage of the earth's career where his mind is would be too rare to support organic life. Even now the mental influence is so strong that he believes the density of the atmosphere to be decreasing."

"Recently," Williams' voice went on, "the star Vega has taken Polaris' place as centre of the universe. Many of the old stars have disappeared, while new ones have taken their places. I have a suspicion that our solar system is either falling or traveling in a new direction through space."

"Listen to me, Williams." Mortimer's voice sounded dry and cracked, and his forehead was besprinkled with great gouts of sweat. "It is the sixth, the last day. What do you see?"

"I see a barren plain of grey rock. The world is in perpetual twilight because the mists that rise from the sea obscure the sun. Heaps of brown bones dot the plain near the mounds that once were cities. The dykes around Manhattan long ago crumbled away; but there is no longer any need for them even were men here, for the sea is rapidly drying up. The atmosphere is becoming exceedingly rarefied. I can hardly breathe. . . .

"Gravitation is giving out more rapidly. When I stand erect. I sway as though drunk. Last night the curtains of mist parted for a time, and I saw the moon fly off into space.

"Great lightnings play about the earth, but there is no thunder. The silence all around is plummetless. I keep speaking aloud and striking one object against another to relieve the strain on my eardrums. . . .

"Great cracks are beginning to appear in the ground, from which smoke and molten lava issue. I have fled to Manhattan in order that the skeletons of the tall buildings may hide them from my sight.

"Small objects have begun to move of their own volition. I am afraid to walk, as each step hurls me off my balance. The heat is awful. I cannot breathe."

There was a short interval, that came as a relief to our tightly screwed nerves. The tension to which the experiment had pitched us was terrific; yet I, for one, could no more have torn myself away than I could have passed into the fourth dimension.

Suddenly the voice cut the air like a knife!

"The buildings!" it shrieked. "They are swaying! They are leaning toward each other! They are crumbling, disintegrating; and the crumbs are flying *outward instead of falling!* Tiny particles are being thrown off by everything around me. Oh, the heat! There is no air!"

Followed a hideous gurgling; then:

"The earth is dissolving beneath my feet! It is the end. Creation is returning to its original atoms! Oh, my God!" There was a sickening scream that rapidly grew fainter with the effect of fading on radio.

"Williams!" shouted Mortimer. "What happened?"

There was no answer.

"Williams! Williams!" Mortimer was on his feet, fairly shrieking into the instrument. "Do you hear me?"

The only response was utter silence.

Mortimer clutched me by the arm, and dragged me with him from the laboratory and down the hall.

"Is—is he dead?" I choked as we ran.

Mortimer did not answer. His breath was coming in quick, short gasps that would have made speech impossible even had he heard me.

At the door of the lead room he stopped and fumbled with his keys. From beyond we could hear no sound. Twice Mortimer, in his nervousness and hurry, dropped the key and had to grope for it; but at last he got it turned in the lock, and flung the door open.

In our haste, we collided with each other as we hurtled into the room. Then as one man we stopped dead in our tracks. The room was empty!

"Where—" I began incredulously. "He couldn't have gotten out! Could he?"

"No," Mortimer answered hoarsely.

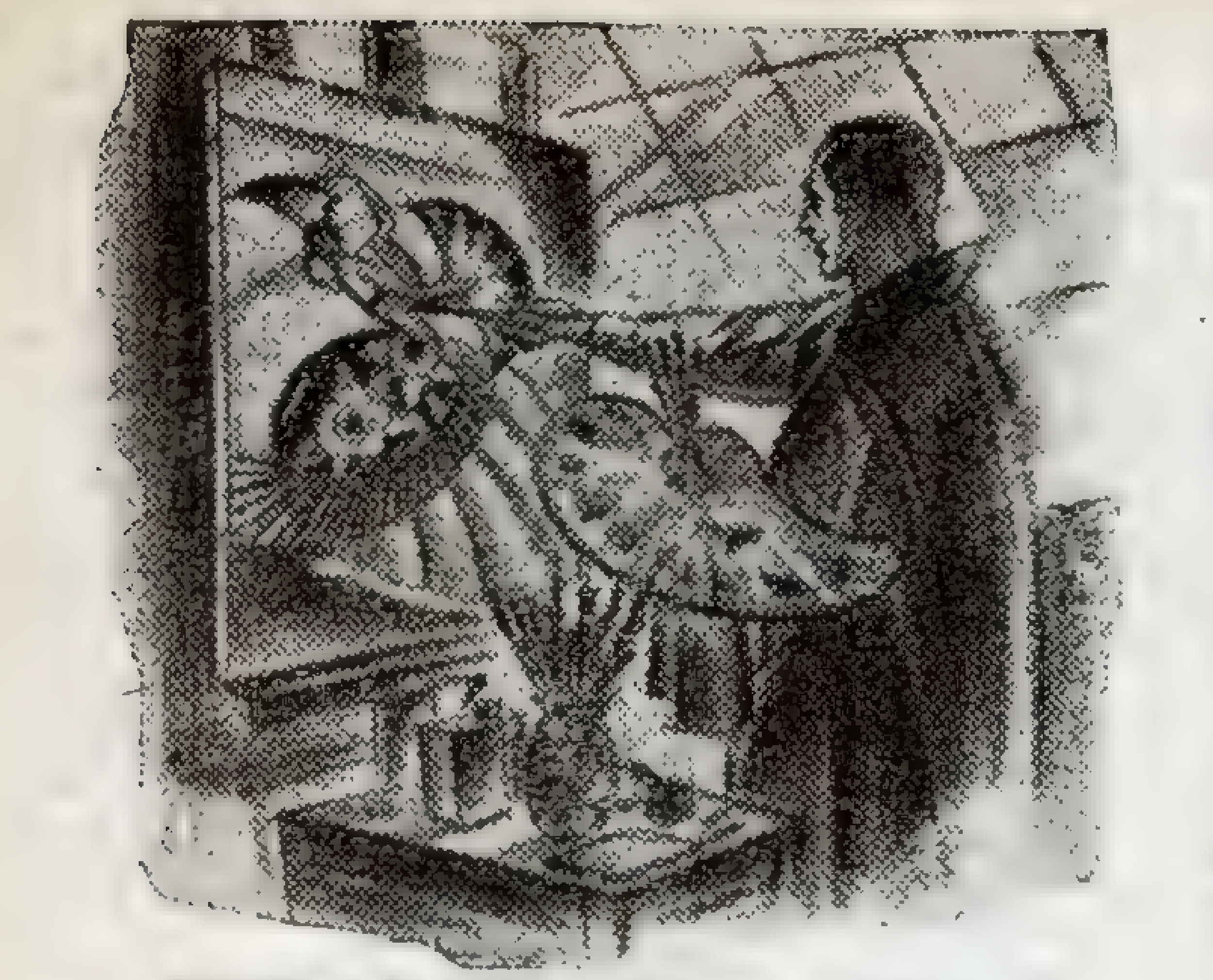
We advanced farther into the room, peering into every crack and corner. From the back of the chair, suspended by their cord, hung the earphones; while dangling from the chair's seat to the floor were the tattered and partially charred remains of what seemed to have been at one time a suit of men's clothing. At sight of these, Mortimer's face went white. In his eyes was a look of dawning comprehension and horror.

"What does it mean?" I demanded.

For answer, he pointed a palsied finger.

As I looked, the first beam of morning sunlight slipped through the skylight above us, and fell obliquely to the floor. In its golden shaft, directly above the chair where Williams had sat, a myriad of infinitesimal atoms were dancing.

THE END



DRAWING *offers* Pleasure *with* Profit

If you like to draw let your talent make your fortune. Publishers pay millions of dollars every year for illustrations. Just notice the art-work in this magazine.

Drawing is easy to learn the "Federal Home-Study Way." More than fifty famous artists contribute exclusive lessons and drawings to the Federal Course—they show you their "tricks of the trade." Including Illustrating, Cartooning, Lettering, Poster Designing and Window Card Illustrating.

Why drudge when you might be an artist? Take your interest in drawing seriously. Send for Free Book "A Road to Bigger Things." Write your name, age, occupation and address on the margin of this page. Tear out and MAIL TODAY.

Federal School of Illustrating
6442 Federal School Bldg., Minneapolis, Minn.

$$ SONG WRITING $$

Big Royalties

paid by Music Publishers and Talking Picture Producers. Free booklet describes most complete song service ever offered. Hit writers will revise, arrange, compose music to your lyrics or lyrics to your music, secure U. S. Copyright, broadcast your song over the radio. Our Sales Department submits to Music Publishers and Hollywood Picture Studios. WRITE TODAY for full information.

UNIVERSAL SONG SERVICE
652 Meyer Bldg., Western Ave. and Sierra Vista, Hollywood, Calif.

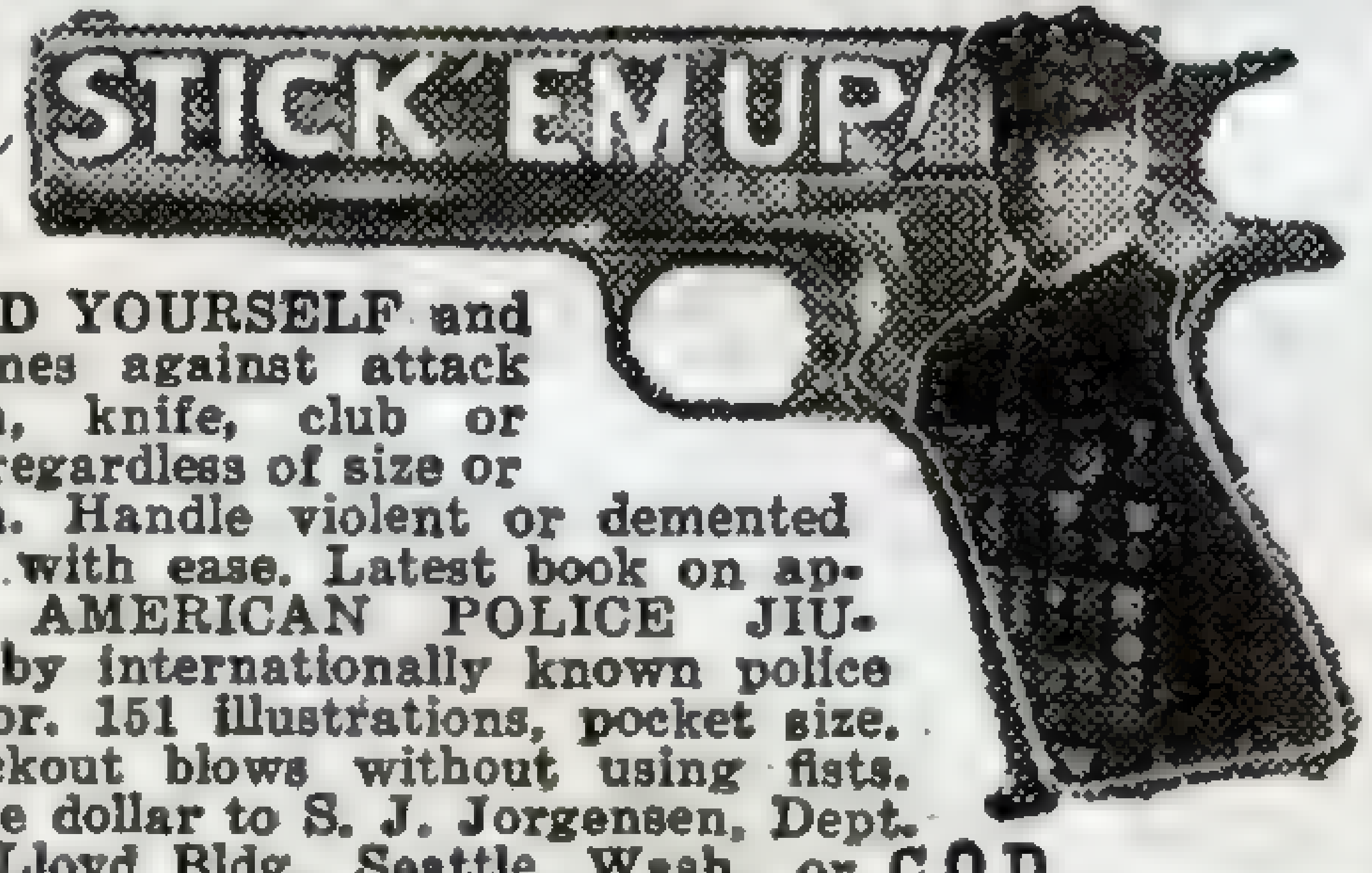
$5,000 WILL BE PAID TO ANYONE WHO PROVES THAT THIS

is not the actual photo of myself showing my superb physique and how the Ross system has increased my own height to 6 ft. 3 3-4 inches

Hundreds of Testimonials.
Clients up to 45 years old gain from 1 to 6 inches in a few weeks!

FIRST IN 1907
FIRST TO-DAY

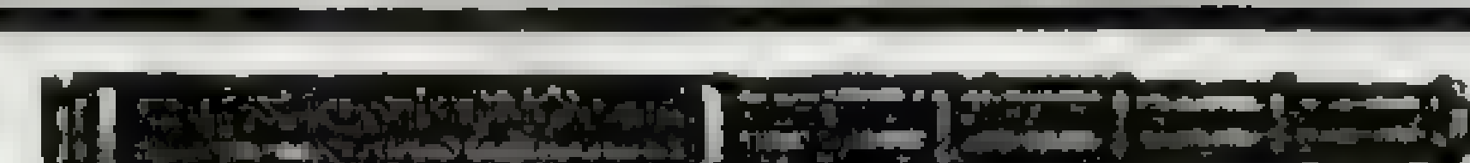
No Appliances—No Drugs—No Dieting
ROSS SYSTEM NEVER FAILS. Fee Ten Dollars Complete
Convincing Testimony and Particulars 5 cents stamps.
"Allow time for return mails across the Atlantic"
G. MALCOLM ROSS, Height Specialist
Scarborough, England, (P. O. Box 15)



Men
and
Women

STICK 'EM UP!

DEFEND YOURSELF and loved ones against attack by gun, knife, club or bullies, regardless of size or strength. Handle violent or demented persons with ease. Latest book on approved AMERICAN POLICE JIU-JITSU by internationally known police instructor. 151 illustrations, pocket size. 13 knockout blows without using fists. Send one dollar to S. J. Jorgensen, Dept. K, 912 Lloyd Bldg., Seattle, Wash., or C.O.D.



Big 3ft. Telescope Five Sections. Brass bound. Powerful Lenses. 10-Mile range. Special Eye Piece for looking at the sun, included FREE. Can be used as a Microscope. Guaranteed. Big value. Postpaid $1.75. C. O. D. 15c extra.

BENNER & COMPANY, T-73, TRENTON, N. J.

GOV'T. POSITIONS

SALARY RANGE $105 to $250 Monthly

MEN-WOMEN

AGE RANGE 18 to 50

WE HELP YOU GET ONE

[ ] Ry. Mail Clerk
[ ] P. O. Laborer
[ ] R. F. D. Carrier
[ ] Special Agent
[ ] Customs Inspector
[ ] City Mail Carrier
[ ] Meat Inspector
[ ] P. O. Clerk
[ ] File Clerk
[ ] General Clerk
[ ] Matron
[ ] Steno-Typist
[ ] Immigrant Inspector
[ ] Seamstress
[ ] Auditor
[ ] Prohibition Agt.
[ ] U. S. Border Patrol
[ ] Chauffeur
[ ] Watchman
[ ] Skilled Laborer
[ ] Postmaster
[ ] Typist

INSTRUCTION BUREAU, Dept. 323, St. Louis, Mo. Send me FREE particulars "How to Qualify" for positions marked "X." Salaries, locations, opportunities, etc. *ALL SENT FREE.*

Name ....

Address ....

Discussions

In this department we shall discuss, every month, topics of interest to readers. The editors invite correspondence on all subjects directly or indirectly related to the stories appearing in this magazine. In case a special personal answer is required, a nominal fee of 25c to cover time and postage is required.

SPEED EXCEEDING THAT OF LIGHT. IN ANSWER TO MR. CHARLES SCHEEMAN IN MAY ISSUE

Editor, Amazing Stories:

You have set me a difficult task. It is almost impossible to give an explanation of this question without resorting to higher mathematics. Accordingly, if I seem to stumble or halt, or if my explanation seems indirect, please ascribe it to my inability to find simple expressions for complicated thoughts.

In one sense Mr. Johnson is absolutely correct. Let us suppose, presumably upon Mr. Johnson's authority, that a certain object, A, is moving with a speed greater than that of light. It is legitimate for us to ask how he knows this. He might reply that he had measured the speed of A and found it to be equal to that of light. After this measure he gave it an additional push. Therefore it is now traveling faster. The reasoning sounds logical enough. But let us again measure the speed of A. In spite of the additional push, we find that it is going no faster than before.

It should not be a surprising thing that time, length, and mass upon a rapidly moving body, *as seen from a point assumed to be at rest* should be different from those upon a slowly moving body. The point of the matter is that the mass of a material body moving with the speed of light becomes infinitely great. Hence any number of pushes would not affect its motion? Remember the story of the irresistible force and the immovable object? Well, in this case the object is really immovable, at least so far as getting it to move any faster is concerned.

If an object *could* move faster than light, its length would become "imaginary," i.e., be equal to the square root of some negative number. It would not be "negative," as Mr. Johnson states.

In conclusion, I may state that anyone is privileged, if he so desires, to think about speeds greater than that of light. It may come as a surprise to many that the physicist knows of many instances of waves' traveling faster than light. Furthermore it is not contrary to the principles of relativity that this can happen. Relativity deals with *signals,* and is founded upon the postulate that no signal, whether sent in the form of a light wave, or in the form of a material particle, can travel faster than light.

Donald G. Menzel,
Lick Observatory,
University of California,
Mount Hamilton, Cal.

(We are delighted to publish this communication from Dr. Menzel, which was sent to us to clear up the theory of the velocity exceeding that of light. Dr. Menzel is a very high authority on relativity and sent us this letter at our personal request. It is quite interesting to see how the subject brings out the difference between a negative quantity and an imaginary quantity; between zero and an imaginery quantity. We think that this very nice presentation of the subject will send some of our readers to their old algebra text books. While the letter is in direct answer to one in our May issue, it applies to many other letters in which this same question has been brought up.—Editor.)

THE ACTION OF REFLECTED LIGHT

Editor, Amazing Stories:

I have been a reader of your magazine ever since it came out in 1926. I have never written before but I am writing now to let you know that I think every story you print is just dandy. I also think that there is nothing wrong with the covers or illustrations.

I have a question to ask you.

When particles of light rays strike a reflecting surface, such as a mirror, and are bounced back, do they lose any of their momentum?

Does the amount of momentum decrease with the dullness of the reflecting surface?

By momentum I mean speed. When you bounce a rubber ball it doesn't bounce with the same speed as it had when it left your hand.

Charles H. Wilson,
Box 234,
Guernsey, Wyoming.

(When light waves are reflected from a mirror, the reflection is never complete—there is always a loss, so that of course if they have momentum and are diminished in number, there is a loss of momentum. The duller or poorer the reflecting surface, the greater is the loss, but the speed of light is invariable. Before and after reflection light waves have the velocity of 186,000 miles per second. This is an absolute characteristic of light. It does not change its velocity under any conditions. The rubber ball analogy does not apply.—Editor.)

ABOUT FILM PICTURES BASED ON STORIES SUCH AS WE PUBLISH. MRS. SHELEY'S FRANKENSTEIN

Editor, Amazing Stories:

Having read your magazine for over five years, I feel entitled to present you some compliments and brickbats.

Your "Discussions" department is very interesting and I always read it first before turning to the stories. Your magazine is all right concerning cover, size, paper, name and I am congratulating you for having such an artist as Morey to draw your illustrations.

Now, concerning this hokum about scientific movies; it is a lot of bunk. This picture called "Frankenstein" to my estimation is a big failure. When a film company takes such a story as "Frankenstein," and puts it in movies, they make such a mess of it, that it becomes disgusting.

I am wondering if Universal Company will make such a mess of H. G. Wells' "The Invisible Man," as it is a wonderful story, and I for one, would hate to see a story made a farce of just for the sake of extra dollars.

Another thing, let's have more stories by Francis Flagg, A. Hyatt Verrill, Earl T. Bell and Austin Hall. My favorite author is Capt. S. P. Meek, and I am a faithful follower, nor will I stand for bricks hurled at him.

Let's have more Interplanetary stories, as I read them as fast as you publish them. The best Interplanetary stories are "Pirates of Space" and "Skylark of Space."

I also read your Amazing Stories Quarterly, which is another fine magazine. Keep the good work up and I'll stick with you as long as I draw breath.

Howard Sperling,
487 E. 127th Street,
Cleveland, Ohio

(We are glad to get your comments on the "Discussion" columns. It is most interesting to get the views of different readers. Morey has been doing excellent work. He is artist enough to realize when one of his drawings does not come up to the mark and never hesitates to acknowledge it. It is a pity to feel that "Frankenstein," Mrs. Sheley's famous novel, has been injured in the putting of it on the screen. One of our stories, specifically, "Automaton," by Abner J. Gelula, which appeared in our November, 1931, issue, has lately been purchased by the Universal, and we hope that they will do better than they seem to have done with "Frankenstein." But, of course, the film companies are only beginning to experiment with science fiction movies, and it is up to the spectators to write their criticisms to the producers. It seems to us they are simply being too cautious. As far as Captain Meek is concerned, we feel that he wears a triple breastplate to protect him from brickbats, which armour is made up of his own stories. He is one of our best writers. You will get many more interplanetary stories in the Monthly and Quarterly.—Editor.)

A CANDIDATE FOR MEMBERSHIP IN A SCIENCE CORRESPONDENCE CLUB. A TRIBUTE TO OUR COVERS

Editor, AMAZING STORIES:

I am making application for membership in the Science Correspondence Club. I am much interested in scientific subjects. If there are any formalities which must be complied with to become a member, I hope you will let me know.

I have been a constant reader of AMAZING STORIES during three years. My favorite stories published in your magazine are "Through the Green Prism," etc., "Skylark of Space," etc., and the "Jameson Satellite" series. Practically all the stories are interesting though the above named stand out.

The cover illustrations have shown remarkable improvement and Morey is in my estimation a far better artist than Paul, or even Wesso. The monthly editorial and the discussions together with the fine type of story you publish, place you far ahead of any magazine in your field.

Victor Lawson,
2717 11th Street, N. W.,
Washington, D. C.

(We are sure you will be welcome as a member of the Science Correspondence Club. The secretary will take care of all your requirements. It is nice to get a letter from one who has stuck to us for three years. We almost blush to publish your letter, you compliment us so. We shall always be glad to hear from you.—EDITOR.)

GOING BACK TO THE DECEMBER ISSUE

Editor, AMAZING STORIES:

Just let me tell you, your December issue was way below par. The only decent story in that issue was "The Inevitable Conflict." Harl Vincent's story in the magazine wasn't worth a rap. He showed nothing of the great ability which he displayed in the story "Barton's Island." That was a story! I know he is a great writer; I expect great tales from him. The January issue was more improved than the February. But I complain about the story "Troyana." There is nothing original in the first part. It is not very good. Nankivell's finding of the bodies in the underground cavern is not an original scene. You will find a somewhat similar situation in H. R. Haggards story of "When the World Shook." Besides, S. P. Meek has used a very old plot in the story of "Troyana." It has been used numberless times. "The Racketeer Ray" was pretty good. But the story "Sleeping Gas" has it beat a mile. Both are by the same author, Murray Leinster. "The Sages of Eros" is a great little story. So is "The Penthouse." "Heritage of the Earth" is just about fair; nothing new in it.

Your best story for February is "The Planet of the Double Sun." It was superb. Very original too. N. R. Jones has everything that a great writer needs. Don't let him get away. "The Stone from the Green Star" was very good. "*Via* the Time Accelerator" was perfect. You haven't had a time-traveling story for the last three months, going on the fourth. I demand that you get more time stories. I disagree with one of your correspondents, Charles L. Campbell, about Telepathy. Mind reading is not telepathy. Telepathy is something else. It has happened numerous times that two people far apart or near together have had exactly the same thought at the same second. Furthermore, it happened so to my brother and me one winter night in 1931, just before Thanksgiving.

Get more of Smith's themes. More surgical stories. Also "Automaton" was fine. I disagree with Mr. Faisman on it. All he does is pick that classic to pieces. But if he really did not see any merit in it, he wouldn't have taken it apart. The illustration by Morey for "Automaton" is a powerful, dramatic piece of work. It lives. It is masterpiece enough to be placed in an art museum and called the "Rise of the Machine." I don't like the "Antarctic Transformation." The same idea has been written of before. "The Master of Mystery" earns just praise. Now the story "Power," by Harl Vincent, was great. H. Vincent shows his true ability in it. It would make a great motion picture that would be remembered a long, long time. It has great elements of drama. "Thumitak of the Corridors" and "The Lemurian Documents," would also make unforgettable motion pictures. Many of your tales should be screened. I just can't help commending you on the illustration for "Power" by Morey. All Morey's illustrations are dramatically powerful. The figures in his drawings tell the tale. If he has any paintings on exhibition in any art museum, they would be worth seeing. Your magazine is worth reading or I wouldn't be buying it. Take my criticism as being well meaning.

Hyman Vinunsky,
3653 E. 147th Street,
Cleveland, Ohio.

(We think that when Mr. Jones reads your letter, he will then not try to get away from us. While we would like to please everybody, it is futile to attempt to publish any one issue that would be universally popular. The best we can hope for is to please a great many people all the time and the rest, most of the time. Mr. Vincent is an engineer in a high position in one of the great manufacturing companies, a company that takes up a million dollar contract without hesitation. We always look for good work from him. "The Lemurian Documents" we consider very clever and very agreeable reading to those of us, especially, who have not forgotten our school days with Ovid. We are glad that you appreciate Morey's work.—EDITOR.)

A QUESTION ABOUT THE RACKETEERING RAY BY MURRAY LEINSTER.

Editor, AMAZING STORIES:

For the past year I have been an eager reader of both your monthly, and your quarterly, and I have never been disappointed in an issue yet. However, I have certain seemingly obvious criticisms to make on one or two stories.

In the "Racketeer Ray," by Murray Leinster, the very exciting climax comes when the gangster, strapped to the ray machine, is swished off to the moon with great speed and a force of about 600 pounds, according to the author. What I don't understand is this, during the time the ray was in the hands of its rightful owners, and also during the time that the gangsters had it, the beam of magnetism was many times pointed towards the center of the earth, yet nothing happened. As the core of the earth is of a magnetic substance, the ray machine ought to have jumped towards it, smashed up on the surface of our fair planet, and ended the story right there. Maybe my reasoning is wrong. If it is, I would appreciate your enlightening me on that point. Lest Mr. Leinster think that I am too hard on him, let me say at this point, that I read his new story, "Politics," twice in rapid succession; I liked it so well.

The plot of "Cosmic Steeple-Chase," had interesting possibilities, but Mr. Wait greatly lessened my interest in the story by bringing in the stereotyped maldoings of an unbelievable villain. But enough of criticisms, now for a few bouquets.

First let me join Mr. Herbst, Jr. in the request for a sequel to "Thumitak of the Corridors"; it was a wonderful story and well written, and I am sure that a majority of your readers will agree that it deserves this sequel. "The Metal Doom" is a worthy successor to "Troyana," and I am very anxious to see how civilization will emerge from the débris.

It seems hardly necessary to say that I consider A. S. the most interesting magazine on the market, so I can only hope that I will find as many interesting stories in it during the coming year as I did in the last year.

Albert F. Downham,
New York City,
New York.

(We do not clearly understand your objection to the "Racketeer Ray" as regards its action on the presumably magnetic core of the earth. The belief that the core of the earth is virtually iron on account of the specific gravity of the earth and its magnetic polarity, is generally accepted. Perhaps Mr. Leinster will answer this part of your letter. We do not quite see why the ray should necessarily attract the earth. The specific gravity of the moon does not indicate that it had an iron core, though if the ray was attracted to it, or carried an object that the ray emanated from, it would not follow that there was a similar action as regards the earth.

We are entirely in accord with your remarks about the story "Thumitak of the Corridors" and we can only hope that the author will give us the sequel which is hoped for by so many readers. We do not like to praise ourselves, but we do feel at liberty to praise our authors, and we feel that we can promise you very good stories for the coming year.—EDITOR.)

Learn
RADIO
in
10 WEEKS

In the Great Shops of
COYNE
Pay for Your Training in Easy Payments After You Graduate

Don't spend your life slaving away in some dull, hopeless job! Don't be satisfied to Work for a mere $20 or $30 a week. Let me show you how to make REAL MONEY in RADIO—THE FASTEST-GROWING, BIGGEST MONEY-MAKING GAME ON EARTH!

Jobs Leading to Salaries of $50 a Week and Up

Jobs as Designer, Inspector and Tester, —as Radio Salesman and in Service and Installation—as Operator or Manager of a Broadcasting Station—as wireless Operator on a Ship or Airplane, as a Talking Picture or Sound Expert—HUNDREDS of Opportunities for fascinating Big Pay Jobs!

10 Weeks' Shop Training
AT COYNE IN CHICAGO

We don't teach you from books. We teach you by ACTUAL WORK on a great outlay of Radio, Broadcasting, Television, Talking Picture and Code equipment. And because we cut out useless theory, you get a practical training in 10 weeks.

TELEVISION
Is Now Here!

And TELEVISION is already here! Soon there'll be a demand for TELEVISION EXPERTS! The man who gets in on the ground floor of Television can have dozens of opportunities in this new field! Learn Television at Coyne on the very latest Television equipment.

Talking Pictures
A Big Field

Talking Pictures, and Public Address Systems offer golden opportunities to the Trained Radio Man. Learn at COYNE on actual Talking Picture and Sound Reproduction equipment.

Pay After Graduation

To a few honest fellows I am offering an opportunity to get a training and pay for it after they graduate in easy monthly payments. You get Free Employment Service for life. And if you need part-time work while at school to help pay expenses, we'll help you get it. Coyne is 33 years old. Coyne Training is tested — You can find out everything absolutely free. JUST MAIL the Coupon for My BIG FREE BOOK.

H. C. LEWIS, President
Radio Division, Coyne Electrical School
500 S. Paulina St., Dept. B2-8C, Chicago, Ill.

Send me your Big Free Radio Book and all details of your Special Introductory Offer, and how I can pay for my training after I graduate.

Name..............................
Address..............................
City.................. State. ....

DON'T
PLAY BLIND MAN'S BUFF
WITH YOUR LIFE

Why reach out blindly toward the things that constitute REAL HAPPINESS in life? If you are depending on opportunities to make themselves known to you, by waiting to hear, see, or feel them, then you are letting the future slip by. You can create in your life, through the direction of your INNER FORCES, those things that your outer self has been blindly seeking. Edison's greatest inventions were conceived IN THE MIND, not in the eye or sense of touch.

FASCINATING FREE BOOK

For ages the Rosicrucians, an established brotherhood of learning, have shown THINKING men and women how to use their inner forces to attain HAPPINESS and SUCCESS. It has not been done in a sensational, bombastic way, but in preparing them through fascinating study to conquer their daily problems as they arise. Let me send you a FREE COPY of the "Wisdom of the Sages" which will put you in touch with this dependable way of obtaining a new life—HERE AND NOW. A hand of fellowship and help is here extended to you. Will you clasp it? Address:

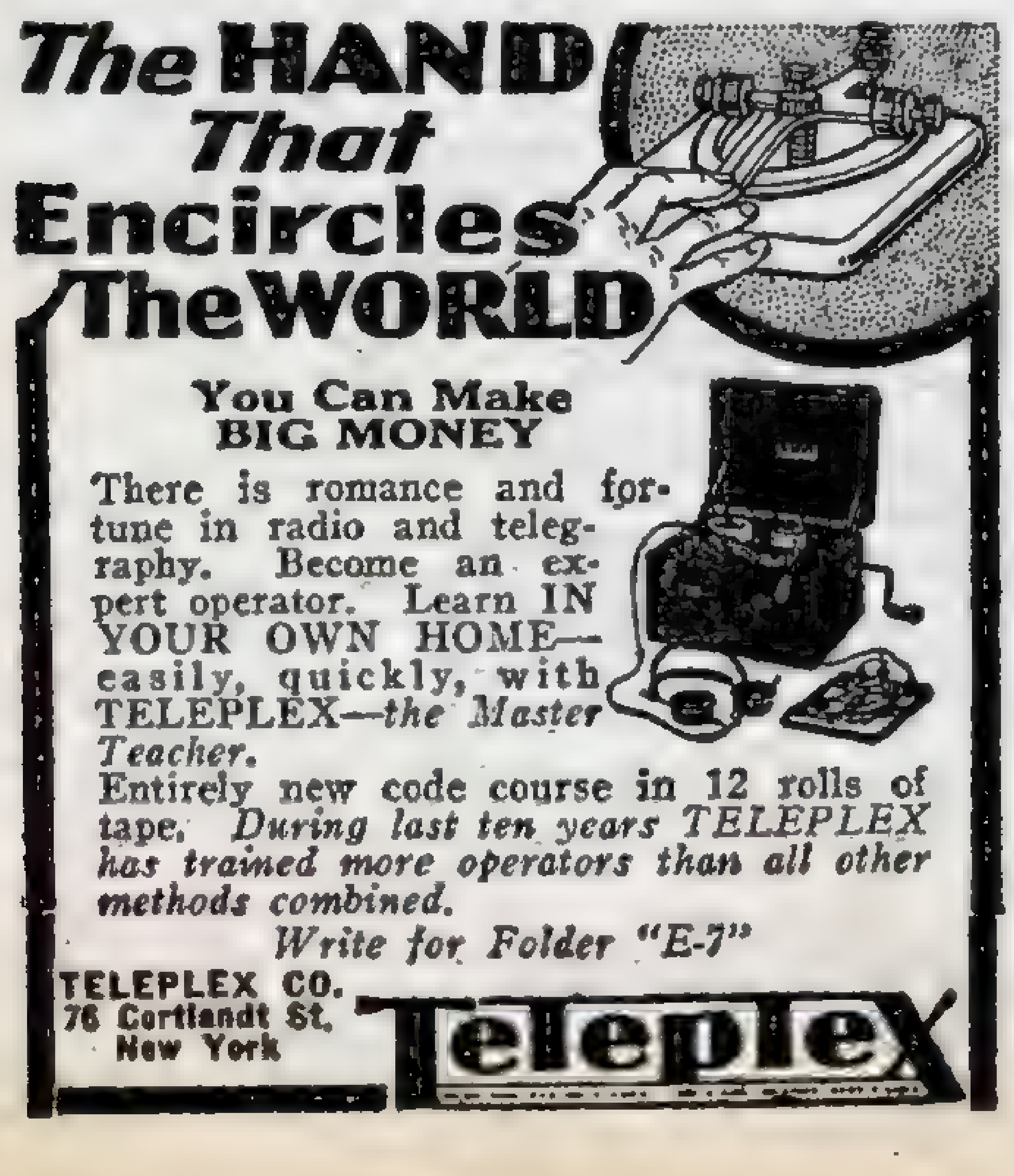
Scribe I P B

ROSICRUCIAN BROTHERHOOD
San Jose (AMORC) California
(Perpetuating the Original Rosicrucian Teachings.)

EARN MONEY
AT HOME

YOU can make $15 to $50 weekly in spare or full time at home coloring photographs. No experience needed. No canvassing. We instruct you by our new simple Photo-Color process and supply you with work. Write for particulars and Free Book to-day.

The IRVING-VANCE COMPANY Ltd.
302 Hart Building, Toronto, Can.



The HAND That Encircles The WORLD

You Can Make
BIG MONEY

There is romance and fortune in radio and telegraphy. Become an expert operator. Learn IN YOUR OWN HOME—easily, quickly, with TELEPLEX—*the Master Teacher.*

Entirely new code course in 12 rolls of tape. *During last ten years TELEPLEX has trained more operators than all other methods combined.*

Write for Folder "E-7"

TELEPLEX CO.
76 Cortlandt St.
New York

ROCKETS TO THE MOON

Editor, AMAZING STORIES:

Some of the readers of AMAZING STORIES perhaps read The Elks' magazine and noticed the article "Rockets to the Moon," by G. Edward Pendray in the October, 1931, issue. I mention this because the article gives such a clear account of the present place of the rocket as a means of travel, and its future possibilities and so some of its readers who perhaps overlooked it may read it.

Lately, AMAZING STORIES has been having some excellent stories. "The Heritage of the Earth" was fine and so was "The Planet of the Double Sun," but I would like to see another sequel to it soon. The only faults I could find were there wasn't enough of "The Pent House" and its illustration was terrible.

Here's something for the readers (at least, I find it effective). When you start reading your AMAZING STORIES turn on the radio (if you have one) and get some music. Any kind will do, except perhaps a string band. I find it lends the story a touch of realism, or perhaps the imagination is fired by music. Anyway, try it.

Recently, I heard a scientifiction story dramatized over the radio by the Collier's Magazine and I thought it very interesting. Why not start a program of your own and tell part of a story or even a whole story from AMAZING STORIES every month. I'm sure more people would become interested in your magazine.

Carl Johnson,
129 Campbell street,
Danville, Virginia

(We quite like your idea of reading AMAZING STORIES to the music of the radio. Personally, we are quite addicted to having the radio play music while we are reading. As far as radio broadcasts are concerned, we are hardly in a position to do what you propose just now.—EDITOR.)

THE QUESTION OF AN INVISIBLE MAN BEING ABLE TO SEE

Editor, AMAZING STORIES:

I have enjoyed A. S. from the start—I came in on No. 6 but was able to get all back numbres by prompt action. My favorites are "interplanetaries"—especially both "Skylarks" and "Spacehounds of I.P.C." and (more recently) "The Stone from the Green Star," which I liked very much. Readers' comments are always very interesting to me, but I have never seen this objection yet, namely, How can a being, made invisible by transparency of tissue, see at all, having regard to the manner in which the eye operates? Would not all the mechanism of the eye be flooded with light and so drown out any image? If there is a good reply to this, I would like to hear of it.

However, I look forward eagerly to each number, and whichever of my youngsters brings me A. S. from the postman, gets a reward, which, you may be sure, insures me very prompt delivery.

L. C. Pitfield,
1 Montague Avenue,
Newtown Hobart,
Tasmania, Australia.

(We have recently published a letter from a dealer as we believe who can supply many back numbers of AMAZING STORIES. Of course his supply will not last forever, so if you are really interested in the magazine as you appear to be, you should value your set very highly. We doubt if there is a good reply to your objection to the operativeness of the eye of an invisible man. We consider your objection ingenious on the side of obviousness. It is interesting to note that we get a great many letters from Australia. We seem to have made quite a hit in the Antipodes. We hope your youngsters, as you call them, will earn many rewards from you.—EDITOR.)

A PLEA FOR MEDICAL STORIES

Editor, AMAZING STORIES:

I have been a reader of a rival magazine for almost a year, but recently I could not resist the temptation any longer and I now am the reader of all three S. F. (science fiction) magazines on the market, and the Quarterlies of the two which have them. Personally, I like them all the same, but my friends are all divided in their choice. I think it was a good idea for the three "mags" to divide between themselves the three outstanding S. F. artists, and you made a good choice in taking Morey, even though I consider both Wesso and Paul just as good.

In the February issue you printed a letter from a Canadian, Charles Fenech of Victoria, who objects to all Martian, Venerian, etc., exploring space ships landing in the U. S. and also the hero in most stories being a U. S. man (I do not use the term American, because it means anybody in the continent), now here is a Mexican who agrees with Mr. Fenech.

"The Planet of the Double Sun" was excellent, even better than "The Jameson Satellite."

Please give us more medical stories, as you are the only "mag" publishing them now.

I wish you would publish the "Skylark" stories in book form. I have been hearing too much about them, and I do not favor reprints unless they are by Jules Verne.

I have heard you have a radio program, but I can't find the station. Will you tell me?

Carlos D. Gonzalez,
New Orleans, La.

(We place Wesso and Morey on a par. We consider one about as good as the other and find that our readers are pleased with both of them. Of course, each magazine runs itself, and selects its own artists and authors. We think the criticism that the heroes of Interplaneary stories are always of the United States is an excellent one and we will try to avail ourselves of it in the future. Compared to the United States, Mexico and Canada have very small populations, but that is no reason why they should be neglected in our stories, except that most of our authors are U. S. A. men and they naturally think in terms of their own country. We are very fortunate, we feel, in having two eminent physicians who regularly write for us. Each of them possesses the art of putting out marvelously good stories. We have no radio program. Perhaps some day we will have. Who knows?—EDITOR.)

AN ANNOUNCEMENT FOR STUDENTS OF C. C. N. Y. AN INTERESTING EXAMPLE OF A YOUNG READER WHO BEGAN WITH AMAZING STORIES WHEN HE WAS ABOUT ELEVEN YEARS OLD

Editor, AMAZING STORIES:

When I was about eleven years old I was interested in a magazine which had just come out—AMAZING STORIES. At the time (as nearly as I can remember) much more attention was paid to the scientific premise and development than to plot. In general, it seems to me, such is not at all the case at the present time. Your magazine is being cheapened. The stories still make good and interesting fiction—I grant you that—but they contain little food for thought. The scientific development and theory is taken as a matter of course, and then the plot (an old hackneyed one, of course) goes on with hairbreadth escapes from various weird monsters.

If the average reader will look a little closer, he will see that the stories quite often diverge from the pales of proven scientific theory. To do so is permissible, even desirable, if the scientific premise is proven to be possible in some manner or other. But no, it isn't done. The author just spends one paragraph on the proof of his premise, or omits it altogether.

I like to sit and read AMAZING STORIES slowly and critically. I am sometimes truly amazed at the number of errors made. If the author is going to contradict scientific theory, let him prove his statements. And you, the editor, a presumably capable scientist, support him in his errors by not pointing them out in the first place, and by then passing them off blithely in the discussions column as of little consequence. Consider yourself reprimanded.

It seems to me that the majority of your readers, my fellow readers should be old enough by now to know that they can get blood and thunder anywhere, but must come to either science-fiction magazines or advanced textbooks for new scientific ideas and possibilities. Thus there does seem to be a definite tendency in the "discussions" and among my friends towards the path I have pointed out—make the authors drop their all old plot and no new scientific principle manner and adopt, at least, some new theories, and above all, do a little explaining.

Letters are also very late in appearing in "Discussions"—several months, in fact. Too bad.

I should like to make an announcement of interest to C. C. N. Y. Student readers. An Astronomical Society has been organized in C. C. N. Y. and will give some very interesting lectures Thursdays at 12:30.

I hope the editor takes my (constructive, I hope) criticism in good spirit, and seriously.

Keller's "Pent-house," while short, was good, and well-founded.

I should be very glad to correspond with any one interested in Physics, Chemistry, Astronomy, Relativity or Mathematics.

Irving Herman,
575 West 189th Street,
New York, N. Y.

(We have to compliment you on your letter. Your remarks are of a nature to guide the Editor. You are not to suppose that the authors of science fiction are not at liberty to wander beyond the limits of absolute science. In spite of being "reprimanded," we hold to the theory that science fiction must participate in exaggeration. Our readers are very fond of Interplanetary stories, but the exaggerations of speed, etc., and the depiction of the imaginary inhabitants on satellites and planets are often far outside the limits of accepted science, but these are precisely the stories which our readers enjoy and which have not the least basis in cold fact. We hope that our authors will read your letter as attentively as we have, and give it the same amount of thought. We will be glad to hear from you again. Dr. Keller's work is excellent always. He has written a great number of short stories, one of them, we understand has been translated into a foreign language and another is to be published in a foreign country. You will find, elsewhere, letters for the "Discussions" columns from those who wish for letters from correspondents.—EDITOR.)

"A TIMID AND RETREATING INDIVIDUAL" WRITES US A VERY CHARACTERISTIC LETTER, LEADING DIRECTLY TO DR. SMITHS', WHICH THEREFORE FOLLOWS:

Editor, AMAZING STORIES:

Being a timid and retreating individual by nature, I never cared to express my opinions openly, but preferred sitting back and reading what others had to say. Evidently some people suffer from acutely nasty dispositions, as vouched for by their themes. I presume, however, that they think they have just cause to expound their grievances publicly, thereby causing the hair on your revered head to grow gray prematurely. Bearing the above statement in mind, I have overcome my modesty (?) and am writing what seems to be a comforting and sympathetic letter so far. Do not have hope, I beg you, for its continuance, for I, myself, do not know my own incompetent mind and this might turn out to be anything from a posie to a bombshell. Nevertheless——

First, I would like to ask if I may, why you printed John W. Strasde's letter both in the February and March issues? *Persona grata?!* A minute error perhaps, but not overlooked, you see. Now you have a fair idea of the close inspection our magazine must go through.

Your stories sounding of wars, adventures, discoveries and the like appeal to me because I am a dreamer. Being a dabbler-in-science, as you might say, their practical side is just as interesting. Besides being a dreamer, and an amateur scientist, I am very meticulous. However, notwithstanding, the scientific data in most of your stories appease my sense of the precise.

Two stories hard to beat, in my opinion, are "Drums of Tapajos" and "Troyana." "Planet of the Double Sun" was a story which had me on edge to its very end. The superb way in which it was written cannot be described by mere words. Neil R. Jones, as an author, is one in a thousand. Tell him I said so, please. Your illustrations are good, and I see Morey has come back to par, nay, surpassed himself, I should say, in the March issue. His illustrations are so well executed, they appear to be stereoscopic. When a man attains that degree of perfection, he is a genius. So hats off to Mr. Morey. I have just one kick, Mr. Editor. The story, "The Degravitator" had a peculiar and decidedly irritating odor about it, which caused me to grasp my offended organ and utter an emphatic "phew." It was too Jules Verneian; that in itself being enough to condemn it. I am sure Mr. Farley can do better. Here's hoping he does, and no hard feelings, Mr. Farley. It is all for the best.

Mr. Editor, many are the kicks and expostulations I have persevered through in the "Discussions." I have emerged unscathed, save for one, which managed to entrench itself under my skin. That letter was the evil element which incited this usually quiet person to rise indignantly, give vent to a cat-call that would span the Atlantic Ocean, and write this letter.

The letter I have in mind was written by an Englishwoman, Miss Olive Robb. It is just my fate to be angered by a letter that turns out to be written by a woman. Nevertheless, I will attempt to rescue the beleaguered Dr. Smith from the clutches of this warring woman. In the first place, has it ever occurred to you, my dear Miss Robb, that Dr. Smith is strictly United Statesian? The fact being so, he cannot be blamed if his expressed thoughts are born in a decidedly United Statesian form. I presume you never realized that the major part of the issue of AMAZING STORIES Magazine is read by Americans, though it may be found anywhere. And however boring and monotonous those slang phrases you criticize may be to you superior, intelligent British, they are, on the other hand, sweet music, dear to the ears of the common average American. Granting Dr. Smith would assume a different mode of expression, it would not be popular, with the reader, simply because it would be artificial. Dr. Smith is at his best with the typical American colloquialisms and should not change his style because it is natural. Man's best effort can only be natural, Miss Robb, I know the editor will corroborate that point for me. I think I have been a bit harsh in my attack upon you, so, with due respect and should you think it necessary, I apologize. But please be more merciful in your condemnation of men who try to please you.

A word of praise for your two constant features the editorial and the Questionnaire. The editorials are emblematic of the high standard of AMAZING STORIES. A wonderful page of intelligent thoughts, and theories wonderfully propounded by Dr. Sloane, so that even the layman may grasp the knowledge which should be rightfully his. I have referred to books which treated the various subjects in some editorials, and they were all truth. Your questionnaires are very enlightening and I eagerly try to answer each question without aid. I hope you never cease either feature, for I fear you will lose some popularity thereby.

In closing, I want you to please send me full particulars about the Science Correspondence Club. I would like to apply for membership. If age is a requirement, I am twenty.

Guy Saunders,
889 Greene Avenue,
Brooklyn, N. Y.

(We have read your letter, word for word, and have enjoyed every bit of it. We generally get pretty good treatment from our English and English Colonial readers, but we are glad to find your very excellent defense of Dr. Smith's American colloquialism. The repitition of the letter in the "Discussions" columns was an error, and we apologize. Your letter requires no comment, but we will follow it here with Dr. Smith's second defense—and we think it's a good one.—EDITOR.)

AN APPRECIATION FROM A WELL WISHING READER

Editor, AMAZING STORIES:

I don't write to magazines very often, but the March issue of AMAZING STORIES which I picked up almost by accident, has certainly made me look forward to other issues with anticipation. I didn't know your magazine featured such stories as Francis Flagg's "Cities of Ardathia." This story is certainly a top-notcher and I have seldom read a better story along the lines of science fiction. Most science stories lack that H. G. Wells touch that appeals to me, but not this one. A story like this in every issue and you can bank on me as another steady customer! On the other hand, two stories back up Flagg's yarn with the real goods—I mean "The Degravitator" by Farley and "Amir's Magic" by Johnson. I like these a lot; their science is *good*. Here's one criticism of the Flagg story—how did the interplanetary rockets trade with the Martians? He only touched on this phase. And the Unlings must certainly be coming back to the Cities. It looks as if this story should have a sequel. How about it, Mr. Flagg?

Jack Barry,
302 Avenue A,
New York, N. Y.

(Curiously enough, the "Amir's Magic" which you enjoyed so much, has been very unfavorably criticized by a native East Indian. Of course, it was never intended as a literal presentation of things in the Far East. We merely felt that it was very good in its plot and denouement. We shall be glad indeed to include you in our fold of ardent AMAZING STORIES fans.—EDITOR.)

BIG PAY
Give Free Merchandise and Get Cash Profits on First Calls!
Giving Away SHIRTS-TIES-UNDERWEAR-HOSIERY!

Money in Your Hand
Here's Your Opportunity

Accept this free golden invitation to represent Carlton Mills — nationally known Men's Wear manufacturers — and a leader in the direct-to-wearer field. Schooling or training unnecessary. Doesn't cost you a penny so cash in on our series of free merchandise offerings. Note the panels to the right and you'll understand why they're irresistible.

Lowest Prices in Years
Unbeatable Values
Orders Come Easy

First calls give big cash profits. Greatest line in America. Finest Dress Shirt selections. Stunning Neckwear. Smartest Hosiery. Complete Underwear and Heavy Outerwear Department. All handsomely sampled.

NEW BIG KIT FREE
Coupon below Starts You

Send for New Spring Outfit. Also details of extra $25.00 Cash Bonus and 40% Profit Sharing plans. All are easy for Carlton Representatives. Rush coupon today!

CARLTON MILLS, Inc.
79 Fifth Ave., New York

1 SHIRT FREE with every 3!
1 TIE FREE with every 3!
1 Suit of Underwear FREE with every 3!!
SPECIAL FREE HOSIERY OFFERS too!

MAIL this COUPON

Mr. Mandel, President, Dept. 512-M
Carlton Mills, Inc., 79 Fifth Ave., New York
Dear Mr. Mandel: I know I can give away Free Shirts, Ties, Underwear and Hosiery. Send sample outfit Free. I'm ready
Name ....
Address ....
City ....State..........

TALK-SING-PLAY
thru your own radio

BROADCAST your voice on programs coming through your radio set — make announcements from any part of house — inject wise cracks, josh and mystify friends. *"World Mike"* made especially for home use, attached in jiffy, any set. *Not a Toy.* Also put on own programs at home, parties, club affairs. Barrels of fun! Deluxe model *"World Mike"* with directions, $1.50 postpaid. (C.O.D. 22c extra) DEALERS—write for our special proposition.
WORLD MICROPHONE CO.
Dept. 1050—718 Mission St., San Francisco, Cal.

He Stopped Whiskey!

An Odorless and Tasteless Treatment When Used as Directed

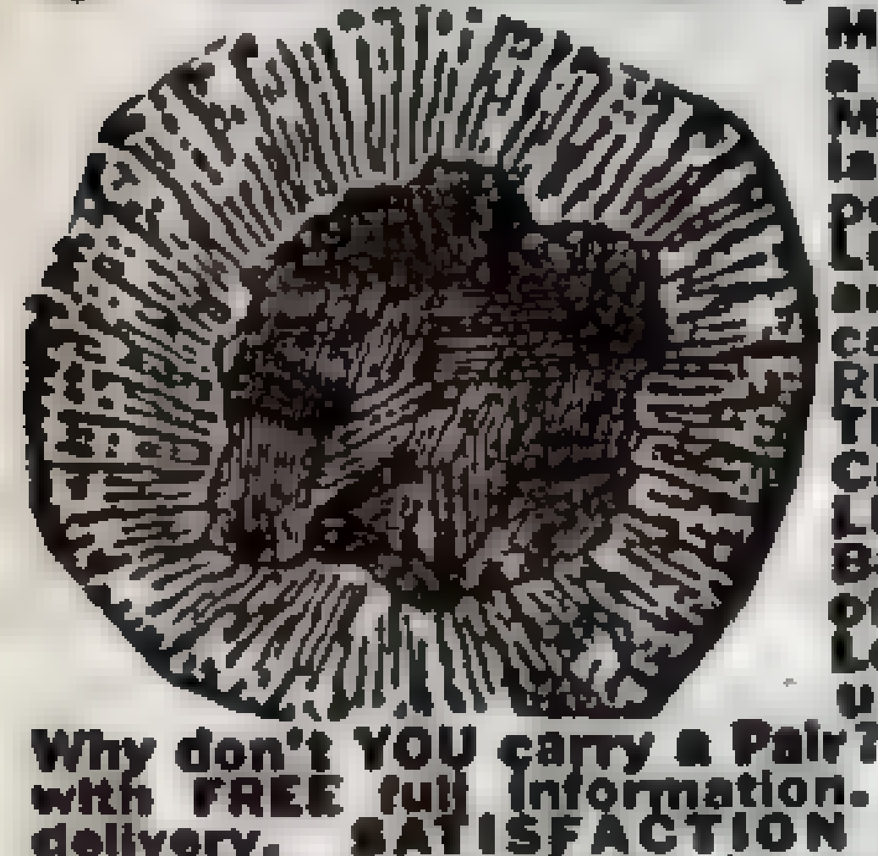
Any lady can give it secretly at home in tea, coffee or food, and it costs nothing to try! If you have a husband, son, brother, father or friend who is a victim of whiskey, beer or wine, send your name and address to Dr. J. W. Haines Co., 579 Glenn Bldg., Cincinnati, Ohio, and they will send you absolutely free, in plain wrapper, a trial package of this wonderful treatment. What it has done for others is an example of what it should do for you. Write today and be thankful all your life.

STOMACH

Thousands of sufferers including many cases of long standing report complete satisfaction from using the Udga Treatment. If you suffer from gas pains, stomach ulcers, bloating, belching, pains after eating, gnawing pains, poor digestion, constipation, dyspepsia, excess acidity, sour stomach, heartburn or associated conditions due to hyperacidity or faulty diet let me send you my splendid UDGA Treatment on TRIAL. Write today for **15-DAY TRIAL OFFER.** Will include **FREE** book on cause and treatment of these stomach disorders, testimonials, affidavit of genuineness and $1,000.00 Reward Offer to back it up. No obligation on your part.

UDGA, INCORPORATED, 1395 Dakota Bldg., ST. PAUL, MINN.

$-BELIEVE IN LUCK?-$



Many people that believe in LUCK are carrying a Pair of GENUINE BRAHMA RED LIVE HIGHLY MAGNETIC LODESTONES. We have received a large number of wonderful Testimonials from people who believe that they have become LUCKY in Money, Games, Love, Business, etc., and claimed much benefit and profit from carrying a Pair of these GENUINE BRAHMA RED LIVE HIGHLY MAGNETIC LODESTONES. They have much faith in these marvelous Curios and consider them to be a POWERFUL LUCK CHARM for the deemed prevention of Bad Luck, Evil, etc., and believed attraction of GOOD LUCK in Games, Money, Business, Love, Happiness, Success, etc. We make no unnatural representations. Believe in LUCK? Why don't YOU carry a Pair? Special only $1.97 for the two, complete with FREE full information. Pay Postman $1.97 and 15c postage on delivery. SATISFACTION GUARANTEED or MONEY RETURNED. You Can't Lose! Order Yours NOW! (Copyrighted—P. S. B.)

Dept. T-93 P.S. BUREAU, General P.O. Box 72, BROOKLYN, N. Y.

NOTICE! We absolutely GUARANTEE these Genuine Brahma Lodestones are ALIVE! Just what you want for they are the REAL THING—POWERFULLY ATTRACTIVE, HIGHLY MAGNETIC! Send order TODAY!

KIDNEY

Acidity Kills Energy

Thousands of men and women past 40, and many far younger, who feel run-down and suffer from Getting Up Nights, Backache, Stiffness, Leg Pains, Nervousness, Acidity or Burning, caused by poorly functioning Kidneys or Bladder, should use Cystex (pronounced Siss-tex) specially prepared for these troubles. Works fast. Starts circulating through system in 15 Minutes. Only 75c at druggists. Guaranteed to satisfy completely or return empty package and get your money back.

NEW SOLES
FROM CANS
as low as 4½ CENTS
SAVASOLE
SAVASOLE
Before
After
Pays Agents up to $42 A DAY

A "Hard Times" plastic shoe repair that millions of thrifty folks now use at home to put new soles on worn out shoes. Rolls on in a minute. Dries hard and smooth overnight forming a tough, flexible, waterproof, non-skid surface.

An old shoe needing costly repairs.

Same shoe repaired with SAVASOLE at 1-10 the cost.

Everybody buys this economy product to save money. You can pocket profits like Baker of West Virginia who made $135 his first week. Savasole has 1001 uses. Guaranteed satisfactory or money back. THE SAVASOLE CO., Division Perfect Mfg. Co., Dept. G-57, Daylight Bldg., Cincinnati, Ohio.

MAIL FOR FREE SAMPLE

THE SAVASOLE CO.
Dept. G-57,
Daylight Bldg., Cincinnati, Ohio

Send me postpaid Free Sample on leather, exclusive territory offer, and show me how to make up to $42 daily. I'm not obligated.

Name ....

Address ....

City ....State............

A WELL THOUGHT OUT LETTER ON THE TOPIC OF SCIENCE FICTION

Editor, AMAZING STORIES:

In reference to the cover of the December issue illustrating "The Inevitable Conflict," I would like to mention that although Morey is a good artist, he was rather careless of the technical details in the illustration. I notice bombs dropping directly into the path of an oncoming plane. Military bombers never fly one above the other in bombing tactics as it usually impairs the health of the aviators. Incidently, the projectiles in the illustration seem to travel forward faster than the planes that dropped them.

Many readers want Paul's illustrations intermingled with those of Morey. That would be swell. But I, for one, realize that it is rather awkward to hire the chief artist of a rival magazine to draw pictures for A. S. However, illustrations don't make the magazine, so let's talk about something else.

F. J. Ackerman of the February "Discussions," agrees with the fellow who wrote this: "'Rice's Ray' was not scientific fiction—it was literature." Has it ever occurred to Mr. Ackerman that scientific fiction is a form of literature? That statement about "Rice's Ray" suggests contempt of the literary ability of the general run of scientific fiction writers. I wonder if Mr. Ackerman still agrees with him.

There is an unusually large amount of criticism regarding "Submicroscopic" and "Awlo of Ulm" pervading the "Discussions" columns. I have seen stories greatly inferior to these receive much less criticism. I suppose it is only natural that the best stories receive the most comment.

If the story "Heritage of the Earth" portrays the author's character to any extent, Mr. Harley S. Aldinger does not have to smoke Murads to be nonchalant. Tremendously important inventions are seemingly trivial everyday occurrences, as far as that story is concerned.

I will not try to give you my opinion of "Troyana." I'll let others express my praise. Captain Meek should have given the hero a better name. Take, for instance, a name like mine. Now there's a swell name.

I think it is silly to use antiquated weapons such as swords, sabers, daggers, and cannon, in a futuristic story like "The Raid of the Mercury."

In reference to "Spacehounds of I. P. C.," the hero, Stevens, uses too many of Dick Seaton's pet slang expressions. His character is about the same, too. I wonder which one would win in a boxing match.

The increasing amount of science fiction to be found in public libraries, and the tremendous success of the movie "Frankenstein," is an indication of the rising popularity of science in entertainment. Recently, I discovered "The Greatest Adventure" by Taine in the local public library, and a very interesting book titled "The Maracot Deep" by Sir Arthur Conan Doyle. Take a tip from me and print the last named story.

"Frankenstein" was a tremendous success in the movies, but I believe that almost any story taken from the pages of A. S. would go over as big and bigger. Imagine "The Skylark of Space" in bright lights on some famous movie theater on Broadway!! And produced by UFA or Howard Hughes with expense no object!

I have heard two scientific radio dramas recently. While one wasn't so bad, the other was simply terrible. I would advise the producers of the last mentioned drama to dramatize a story taken from a good scientifiction magazine.

Many contributors to "Discussions" seem to think it a mark of distinction to use unnecessarily long words in their letters. The majority of these protest against the use of slang in scientifiction. I advise the aforementioned to carefully read over Doctor Smith's entree in the April "Discussions." It may do them some good.

Joseph Buck,
1418 S. 48th Street,
Cicero, Ill.

(We sincerely hope that scientific fiction such as we give is a definite form of literature. We feel that you are right in your idea that the best stories may receive the most criticism. These criticisms are really compliments to all intents and purposes. If Capt. Meek should use your name in some future story, would you think it was a case of "passing the Buck." There are indications, definitely pointing to A. S. that the directors of the film drama are waking up to the use of science in the plot. We hope that you will find an interesting correspondent with whom you can carry on discussions in writing. We know that our Discussions columns have brought this about in several cases.—EDITOR.)

DR. SMITH MEANS IT THIS TIME

Editor, AMAZING STORIES:

Miss Robb, now in the role of champion to a host of "mute, inglorious Miltons" who hesitate to enter the lists themselves, elects to continue the battle. Unleash the hounds of war; let the lions roar; let innocent bystanders run for their lives! For I perceive that this bids fair to become an internecine conflict, in which neither Miss Robb's sex nor my sparse gray locks will suffice to stay the barbed shafts of truth so soon and so viciously to fly!

Firstly, my fair enemy is simply begging the question when she awards the *croix de je ne sais quoi*, with *beaucoup* palms, to Campbell; for I do not believe that I have ever questioned the very evident superiority of that brilliant youth. Even if I did harbor some such secret thought—which, consciously, at least, I do not—what good would it do? The fact would still remain that neither of us are in any position to nudge the Grand Llamas from their eminences; and, such being the case, of what posible use is it to try to get anyone excited about whether Campbell should be ranked sixteenth and me seventeenth, or *vice versa?* Fie on you, Olive, for trying to drag such a red, red herring across my path!

Secondly, I also have received letters of support in this verbal warfare. One ebullient youth signs himself "Yours for more blinding flashes, louder reports, and redder spiders." Other cheering and recurrent phrases are "Seaton's language is the life of the party—keep it up!" "Seaton is natural; long may he wave!" "Don't change a word of your slang." "I like it. . . . I use 'all x' myself now." "It's all x with me, Doc." "I have read the attack upon your use of slang, and am writing to ask you to pay no attention to it." And so on. Now, you Discussers, instead of writing to either Miss Robb or me, thus making us both think ourselves triumphant, why don't all of you write direct to AMAZING STORIES—an impartial battlefield—and take a chance on getting stuck a couple through the wishbone?

Thirdly—My dear Olive, your logic and your counting are both atrocious. In your first letter you asserted that not a single character used Seaton's slang. Now, having had Dunark pointed out to you, you state, positively and with every appearance of sincerity and of studied knowledge, that he used such language only once. You also give the impression that you are referring only to the "Skylark" stories. The facts are that you quoted slang from "Spacehounds" and that the 250,000 words referred to included "Spacehounds." Furthermore, Dunark, a minor character, appears only seldom; in most of these appearances he speaks his native language instead of English; and no few of these scenes are of such a nature that even Seaton is using formal language. Now, it is a matter of record that even with all these limitations upon his tongue, Dunark did in actuality use perfectly good American slang upon no less than 9 occasions, as follows—Oct., 1928, pp. 616 and 625; Aug., 1930, p. 393; Oct., 1930, pp. 623, 624 (3 times), 628 and 629—and I will believe that you will find, upon mathematical analysis, the percentage of slang in Dunark's English speech to be approximately as high as in Seaton's. Therefore, I certainly am not damned on that point, and you are charged with at least one evident, if not willful and malicious, mis-statement of published and demonstrable fact. Indeed, I am regretfully forced to conclude that if Seaton were writing this Discussion instead of me, he would undoubtedly declare—"Olive, you're full of little red ants, clear to the neck!"

Fourthly—It so happens that I take a great deal of pains to make my stories internally consistent; that being one reason why I am such a slow writer. Now, when it is declared, without even an attempt at proof, that consistency and I are complete strangers, I am being mauled in a tender spot and I begin to see red. Miss Robb attacks that tender spot viciously, thus—"Consistency? Conspicuous by its absence! Versimilitude? A boomerang, Dr. Smith. . . ." Rhetorically, this excerpt is very pretty, but does it even approximate the truth? I declare flatly that it does not. The stories are on record; the jury of discussers has read them; and I, hereby, challenge Miss Robb to point out to that jury page references to a few of the places in which consistency is most blatantly conspicuous by its absence. Versimilitude is purely relative; its presence or absence cannot be pointed out in any one exact paragraph, as can violations of consistency. It is my contention, however, that the "Skylarks" sound more plausible with Seaton as he is than they would have sounded had Seaton been drawn as Miss Robb wants him. I may, of course, be wrong—you, the jury, will have to decide that.

Fifthly—Miss Robb is "hoist by her own petard" in calling to her aid the book, "Cruelty to Words." Just where in that book, my dear Olive, and how authoritatively, does it bar colloquial language *in conversation*, as an adjunct to character drawing? Also, just where, in my published stories, have I violated tenets of good composition in any of the fashions so ponderously exemplified by Mr. Weekley?

Sixthly—I do not ascribe my singular conjugal felicity (and believe me, ace, you chirped it then, even if you did think you were kidding somebody) to my use or abuse of languge, nor to anything else about myself. If Jeannie were not Jeannie, said felicity would very probably be anything else but. Indeed, it may even be that her toleration of my "merely crude" love-terms is only another manifestation of an unusually magnanimous nature.

Edward E. Smith, Ph.D.,
Hillsdale, Mich.

(Because Dr. Smith can so ably defend himself, we will make no comment, except to agree with his suggestion that all missiles in this battle be sent us.—Editor.)

A LETTER GIVING US THE ACCUMULATED WRATH OF YEARS FROM A CORRESPONDENT WHO WRITES TO US FOR THE FIRST TIME

Editor, Amazing Stories:

Here's another voice amongst the crowd of people that have read A.S. from the first, and who are only now beginning to write to the Editor. This being my first letter, you may prepare to receive all the accumulated wrath of years, dealt out in tons and hundredweights. No, don't worry—I prepared a whole drawer full of brickbats, but I've mislaid 'em.

A.S. has had rather an adventurous existence, with ups and downs in plenty, but now the middle way has been found at last, and improvement is steady. In the beginning you used to reprint the older stories, and jolly good they were. "The Land that Time Forgot," "A Columbus of Space," and "Station X," and "Treasures of Tantalus," were great yarns. ("The Moon Pool" was rather a fraud after all I expected of it), but the authors of those days were afraid to venture too far into scientific marvels (though Burroughs and Cummings did wonders), and so their productions cannot compare with the masterpieces of the present. Still, I vote for a reprint now and then, or rather, I uphold the idea broached by Messrs. Miller and Jenson, to issue either a set of scientifiction classics or a reprint annual. There are dozens of available yarns: Burroughs, Merritt, Cummings, R. M. Farley, etc., have written dozens of yarns you have never published. Which reminds me—try and get in on Edgar Rice Burroughs' tales before the "Blue Book" snaffles them, as is the case; he is, in a different way, as good as E. E. Smith. Much as I revere Mr. Smith, I consider that he ought to come a grovel in the dirt as penance for the disgusting way he ended the "Skylark" yarns, just as we were settling down to await another dozen or so of them. Then he ought to grovel again for killing off Du Quesne. Though his villainies were many, I liked "Blackie." But three yells for "Spacehounds of IPC," *Superbe et magnifique*, as the Froggies say. Campbell writes a lot more science than Dr. Smith, but he will not reach the plane of that gentleman until he learns to wirte a story with a plot in it, instead of a rather feebly connected series of events. Talking of authors, I must throw in some praise for Stanton Coblentz (is he Coblentz the astronomer?), Miles J. Breuer, Jack Williamson, David H. Keller, Abner J. Gelula and L. A. Eshbach.

Breuer's sole claim to fame lies in "Paradise and Iron," a real classic, but the rest of his yarns were tripe. Jack Williamson used to be bad, but "The Stone from the Green Star" far outdoes Merritt in some of the descriptive passages. The conceptions were beautiful. Keller is always surprising one. Gelula's "Automaton" was an excellent example of a thin plot well treated. Harl Vincent is a most curious personage; sometimes he writes little gems, such as "Invisible Ships" and "Too Many Boards," and sometimes, he dares to pen such utter antiquated, unintelligent infantile rot as "Tanks Under the Sea." He could leave out the American "dialect" in his conversations and not lose by it. I don't think that even Americans always talk like his characters. Yes—I admit that, being Australian, I am prejudiced, but I think you will agree with me.

I am glad you got rid of Paul. His face fungused Professors make me have hysterics. Wesso is the uncrowned king of the artists.

In your November, 1931, issue, Mr. Fisher says in his letter, that the light of the sun would have to go a roundabout way to be reaching us now, and he does not believe that by looking in an opposite direction we could see it. According to the space curvature theory of Einstein, this is quite possible, for the light would merely travel round the spacial sphere and return to its starting point. This, unfortunately, cannot be verified, because it has been calculated that the circumference of the said sphere is so great that when the light reached us after its journey, it would be too feeble to enable us to see its source.

Nevertheless, it is a generally accepted idea nowadays, that light does eventually return to its starting point after having traversed all space.

On the question of time travel, this is too illogical in its results to be possible. For one thing, we could travel into the past and change history. For instance, some one might go and kill Lord Nelson just before the Battle of Trafalgar, or arm Napoleon's troops with bombs and cordite and give him a few steel battleships. In that case, all history would have been changed, and the modern times would be entirely different. No, we can't meddle with the past. Ditto for the future. With a time machine, one could find out that one was to be killed the next day, and merely hop over into the day after next, and so be living after one is dead. Too bad. The idea lately seems to be that time is a sort of river, and the present is a boat floating in the stream, and the clever inventor makes the boat travel a little faster, but we do not travel appreciably forward. Poor traveler sets control for a thousand years hence, and is dead of old age before he gets there. Nix on time traveling.

My little note groweth long, and the editor noddeth in boredom. Well, another couple of pages and I'll be finished.

I must expect to be crushed under with criticism on those last two paragraphs about space-curvature and time-travel. Somebody will pick holes in my ideas. I must apologize if they are too scientifically incorrect, but at the age of 15 one has not yet gained his Ph.D., etc. Still, at the age of 15 one does have an opinion on how rotten some stories are, and I think that I can do better than some of these written by "occasional" authors who write one tale and then forever hold their peace.

Here's to Amazing Stories, the best of all the science fiction magazines. It makes one cheerful to think of it.

George R. Turner,
67 Highbury Grove, Prahran 51,
Victoria, Australia.

(We are getting a great many letters from Australia, for our magazine has very friendly readers in the Antipodes half way round the world from us. Your letter from your distant country is so full that it hardly needs an answer. We are much interested in your comparison between Dr. Smith and Mr. Campbell. Mr. Coblentz, who is acquiring quite a standing in literature, is not the astronomer. Miles J. Breuer, David H. Keller are both physicians of very high standing. We are hoping to see "Automaton," by Mr. Gelula, on the screen soon. The Universal Pictures Corporation, is producing it now, but has not announced its release date yet. Dr. Breuer's "yarns" have been admired by all. It is absurd to designate them as you do. When you visit us some time in the future, you will find that American cultivated people and even the more common ranks really use very little slang. We absolutely agree with you that time travel seems absurd, but it is a good basis for a story, and we cannot be too sure of any absurdity.—Editor.)

Made of Bakelite
All Approved Equipment

Now Sells for $2.95

The IMPROVED ALLADIN AUTOMATIC WATER HEATER

Agents' Price $1.95. You make $1.00 clear profit.

ALLADIN leads the way with this sensational new guaranteed, AUTOMATIC water heater. Plug into your wall socket and turn on the water. Out it comes—sizzling hot. Just turn off the water and AUTOMATICALLY the current is disconnected. Do not be fooled by other heaters that are not automatic and burn out. FITS ANY FAUCET. What a convenience for washing dishes, shaving, washing a few pieces of lingerie and countless other uses. Safe and dependable at all times. Now for the first time offered at this low price—only $2.95.

FULL YEAR'S GUARANTEE

Get this amazing time-saver and enjoy its remarkable convenience. The Amazing ALLADIN is guaranteed for one full year against all defects in manufacture and materials. ALL APPROVED EQUIPMENT. No wiring or installation necessary. The ALLADIN slips over any size faucet in a jiffy and can be carried from one room to another without trouble.

$1.95 Sample Brings Easy Money

Make a complete and convincing demonstration in less than sixty seconds. Slip the ALLADIN over a faucet, plug into a light socket, turn on the water, and PRESTO!—your customer won't let you take it away. Every time you do this it puts a dollar in your pocket—clear profit. Ten, fifteen, twenty times a day—depending only on how quick you travel. House after house, office after office, store after store—everywhere orders are waiting. Get your sample NOW for $1.95, and get our big money making plan. Start AT ONCE!

ROBINSON-SCHENKEL CO., Dept. M-7
215 Fourth Avenue, New York, N. Y.

☐ Enclosed find money order for $1.95. Please send me one ALLADIN Automatic Water Heater for 110 volt, A. C. current, order blanks and selling information.

☐ Please Note: Check here if you have D. C. current. (D. C. model not automatic.)

I understand that upon receipt of this sample outfit I can take orders and collect $1 cash deposit on every ALLADIN Heater I sell. I will send orders to you and you will ship direct to customers, C. O. D. for the balance, plus postage.

☐ I would like to have additional information before acting as one of your agents. Please send this by return mail, without obligation on my part.

Name ....

Street ....

City ....State...............

Canadians please remit cash with order. Other foreign countries 75c extra for each unit, cash with order

U. S. GOVERNMENT JOBS!

$1260 to $3400 Year

Steady Work ! Short Hours

Common Education Usually Sufficient

Men—Women 18 to 50

Mail Coupon today sure

COUPON

FRANKLIN INSTITUTE
Dept. S177, Rochester, N. Y.

Sirs: Rush to me without charge (1) 32 page book with list of U. S. Government steady Jobs obtainable. (2) Tell me how to get one of these jobs.

Name ....

Address ....

NEW LOW PRICES
GOODRICH-GOODYEAR
Firestone - U.S.
AND OTHER TIRES

12 MONTHS SERVICE GUARANTEED

Lowest Prices on Earth!
Thousands of satisfied tire users all over the U.S.A. Our 15 years of business speaks for itself. This big responsible company will supply you with reconstructed standard make tires at lowest prices in history—Guaranteed to give 12 months' service

Don't Delay—Order Today

CORD Tires Size	Tires	Tubes	BALLOON Tires Size	Tires	Tubes
30x3	$2.20	$1.00	29x4.40	$2.30	$1.10
30x3½	2.25	1.00	29x4.50	2.40	1.15
31x4	2.95	1.15	30x4.50	2.45	1.20
[illegible]	2.95	1.15	30x4.95	2.90	[illegible]
[illegible]	2.95	1.15	[illegible]	2.95	[illegible]
34x4	3.20	1.15	[illegible]	2.95	[illegible]
32x4½	3.20	1.45	[illegible]	3.10	[illegible]
33x4½	3.20	1.45	[illegible]	3.20	1.40
34x4½	3.45	1.45	[illegible]6.00	3.20	1.40
30x5	3.60	1.75	33x6.00	3.20	1.45
[illegible]	3.60	1.75	32x6.20	3.50	1.65
[illegible]	4.45	1.75	All Other Sizes		

DEALERS WANTED
Send only $1.00 deposit with each tire ordered. We ship balance C.O.D. Deduct 5 percent if cash in full accompanies order.
Tires failing to give 12 months service will be replaced at half price.
YORK TIRE & RUBBER COMPANY, Dept. 1224
3855 COTTAGE GROVE AVE., CHICAGO, ILL.

How to Obtain A Better Looking Nose
Improve your personal appearance
My free book tells you how I guarantee to improve the shape of your nose by remolding the cartilage and fleshy parts, quickly, safely, and painlessly, or refund your money. The very fine, precise adjustments which only my new patented Model 25 Nose Shaper possesses, make results satisfactory and lasting. Worn night or day. Over 100,000 users. Send for free book to
M. TRILETY, *Pioneer Nose Shaping Specialist*
Dept. 326 BINGHAMTON, N. Y.

Outdoor Jobs

WANTED—Names of men desiring steady outdoor jobs; $1,700—$2,400 year; vacation; pleasant, healthful work. Patrol parks; protect game. Details Free. Write
DELMAR INSTITUTE
Dept. A-38, Denver, Colo.

BIG FACTORY SALE
NEW MODEL
Extra Strong
Copper Boiler

SOLID CAST SCREW TOP
HEAVY COPPER
5 Gallon $5.85
7 7.97
10 10.71
15 12.88
20 15.72
25 19.12
30 23.37

The best, strongest, heaviest and safest Utility Copper Boiler made. New Improved adjustable cap and spout makes boiler steam-tight by twist of thumb screw. Ideal home cooker, boiler and pasteurizer.
BIG CUT To Early Buyers
Order Now—Save Money at these New Low Factory Prices. No article of such high quality and utility ever sold at such amazingly low prices. Guaranteed.
Guaranteed PURE COPPER
Prices quoted are net, cash with order, or send one-fourth, money order or check. Pay balance C. O. D. Ask for Free Catalog. Shipped in plain strong box.
Home Manufacturing Co. 18 E. Kinzie St. Dept. F CHICAGO, ILLINOIS

OPPORTUNITY AD-LETS
These columns will appear monthly in AMAZING STORIES
Rate—Eight cents a word. Cash should accompany all advertisements unless placed by an accredited advertising agency. Advertisements for less than 10 words not accepted.
TECK PUBLISHING CORP., 350 Hudson St., New York, N. Y.

BUSINESS OPPORTUNITIES

MONEY MAILING CIRCULARS at home. 25c brings, particulars, samples, magazines. Pennell Standard, Covington, Kentucky.

MAKE EXTRA DOLLAR. Sample and Information free. Schollmeyer, Brooklyn, N. Y., Post Box 35, Lefferts Station.

CORRESPONDENCE COURSES

Used correspondence school courses and educational books sold, rented and exchanged. Money-back guarantee. Catalog free. (Courses bought.) Lee Mountain, Pisgah, Alabama.

FOR STAMP COLLECTORS

STAMP COLLECTORS. Selections of desirable stamps sent on approval at 70% discount from standard catalogue prices. Reference required. J. Emory Renoll, Dept. AN, Hanover, Pennsylvania.

MISCELLANEOUS

200 LETTERHEADS 6 x 7, 100 Envelopes, $1.00. 25 calling cards FREE. Script or Gothic type. Ideal Printery, 236 S. 10th St., Baton Rogue, La.

CURB WORRY. Helpful article. Davis Russ, P. O. Box 4923, San Francisco, 30c coin.

HYPNOTIZE. Strange secrets; instructions 10c. DeSala, 2518-S Portland, Louisville, Ky.

BACK NUMBERS Science Fiction Magazines. Stuyvesant Book Shop, 31 3rd Ave., New York City.

PHOTOGRAPHY

HAVE YOU A CAMERA? Write for free sample of our big magazine showing how to make better pictures and earn money. American Photography, 3105 Camera House, Boston, Mass.

PRINTING OUTFITS AND SUPPLIES

COMPLETE PRINTING OUTFITS, presses, type, ink, paper supplies. Write for catalogue, Kelsey Co., G-67, Meriden, Conn.

Amazing Stories Money-Saving Subscription Offer

AMAZING STORIES

When you become bored with the usual, turn to Amazing Stories, the magazine of scientific fiction! Wierd, fantastic stories from the borderland of science, where the incredible meets the possible.
If you would travel under the sea—to the Moon or to Mars, beyond even the limits imposed by your own imagination—if you would know again the thrills that used to come in reading the stories of Jules Verne—if you would know life from fifty to a thousand years from now—read Amazing Stories, and revel in the most stimulating reading of the day!
1 Year—$2.50 ☐ * Save 50c. 2 Years $4.00 ☐ Save $2.00

AMAZING STORIES, 222 W. 39th Street, New York, N. Y.
Enclosed find.............. Enter my subscription for.....years.
Name...
Address..
City.............................. State..................
* Saving over single copy price. Dept. 7

ONE OF OUR JUNIOR CRITICS AND LIKE MANY THE YOUNGER CORRESPONDENTS HE IS QUITE PROFICIENT IN SEVERITY

Editor, Amazing Stories:

I am another of the wise people of the younger generation, age 15, who seem to enjoy your (our?) magazine so much. Likewise, I have been bitten by the author bug, genus nuisance, as have many others of my own age. I have written one yarn and have started a second, both of which I wish to send to you. But I am deterred by an answer you gave in the February number to another chap who wanted information about how to sell his stories. You told him that the manuscript should be typed out before posting. I am in the unfortunate position of having no typewriter, having no relations or friends who own one, and of being entirely unable to procure one anywhere.

Therefore—yarn cannot be type
Yarn has not been posted.

All the object of the foregoing blather is to find out if I may submit the handwritten manuscript. Will you please give me an answer on this subject in your Editor's note at the end of the letter?

Now for the real business for which letters to "Discussions" are written, i.e., to sling mud at your best yarns and authors.

Mr. Smith, where are you? Where are those half dozen or so sequels to "The Skylark of Space" and "Spacehounds of IPC." You're easily the best author of the bunch, and yet you drop us a pearl only about once a year! Criminal! More about Seaton and "the bunch," and those bright young things in the Norlaminian swimming pool, and more about that "pure mentality" that gave us such a darned good laugh for a few pages in "The Skylark of Space." We (A. S. public) will swallow things from your pen that would condemn any other author as an "Arabian Nights" addict. I like your taste in selecting weird forms of life. The Vorhuls, Hexans and Titanians had me tickled pink. No one else would dare to imagine them (except Edgar Rice Burroughs). Especially write more about Mrs. Seaton and Mrs. Crane. I'll never forget that description of Dorothy getting on the outside of a box of chocolates. But why did you kill Du Quesne? He was the most interesting character of the lot of them and he supplied most of the plot. Talking of plots, "Skylark Three" and "Spacehounds" didn't have any to speak of. Remember that.

Now for the eminent rivals, for the Scientifiction laurel wreath, Mr. Campbell. You certainly deserve your share of the kudos, but you have apparently less idea of the value of a plot than anyone else in the writing business. You haven't produced a single connected yarn yet. They have all been long dissertations on science, written in a minimum of words of ten syllables. I know nothing of higher mathematics, and though I pride myself I have a fair working knowledge of the atomic theory, I can't follow the opening pages of "Islands of Space." I hope your yarn in the next Quarterly is to be a sequel to that story. Cultivate a better acquaintance with Torlos. He is of more interest than Arcot, Morey, Wade and Fuller, all rolled into one.

Dr. Keller, you should be ashamed of yourself. In two years you have produced only three decent stories! Namely, "The Flying Threat," "The Ambidexter," and "The Pent House." Where are those surprise endings people talk of so freely? I have seen but five in my existence as an Amazing Stories reader (ever since the first copy). I may be dull, but I saw no science in "Free As the Air."

Three cheers and a bouquet! "Troyana" is here. After the infinitely idiotic "Submicroscopic" and "Awlo of Ulm" it is an occasion of rejoicing. Likewise, more cheers for Murray Leinster; "The Racketeer Ray" was a corker. Again cheers—Neil R. Jones has conceived an interesting idea at last. "The Planet of the Double Sun" was in the nature of a triumph. So far so good for the February number, but what was the idea in publishing those two screaming examples of puerile rot, "The Sages of Eros" and "Heritage of the Earth." The former contained only an idea about the formation of the asteroids that won't pass muster, and the latter contained no idea at all. To add insult to injury, it was also badly written. At the moment of entering the big space car with the old Roman codger in it, the author almost rose to heights of laughable melodrama. I think I'll introduce a little melodrama into the action by making the barefaced, brazen statement that I think my own first attempt is better. I don't know whether to withdraw that or not—I hear a sound suspiciously like an Editorial sneer—perhaps I had better, for argument's sake.

That's the lot, and probably plenty too much. Except one thing. Why is there no story competition now? There was one five or six years ago, and several authors who are very popular now first became prominent because of it. Why not have another? "Full many a flower is born to blush unseen" (that doesn't sound right) would probably cast some sweetness on the scientific air. Talking of people who became prominent during that competition, where are Cyril G. Wates and Claire Winger Harris?

A bouquet to John Taine for "Seeds of Life," and a ton of bricks to Clinton Constantinescu for "War of the Universe." I hope one of his fifth dimensional green crystalline formations clogs his inkwell to boot.

George R. Turner,
67 Highbury Grove,
Prahan St.,
Victoria, Australia.

(If your story is very legibly written and you have left plenty of room between lines and big margins, and have used one side of a sheet only, we'll make an exception in your case and read your manuscript.

Dr. Smith is a limited producer, that is to say, he does not write a great many stories in a year. Perhaps that is why what he does submit is generally definitely worth while. After Conan Doyle in his novels killed off his hero, we think it was in Switzerland at the Bruenig Pass, he brought him to life again for more novels. Perhaps Dr. Smith can do something similar with Du Quesne. The stories which you pronounce semi-idiotic have been greatly enjoyed by many readers. You must appreciate the position of the editor. He wants to publish stories which his readers like. That has to be the criterion of merit. You speak of adding insult to injury. I wonder what our authors will think about that when they read your letter. We publish this letter without at all agreeing with it and hope it will show that our "Discussions" column can accept brickbats.—EDITOR.)

"WRITTEN SO YOU COULD UNDERSTAND IT"

Editor, Amazing Stories:

Although I am not a direct subscriber to Amazing Stories, being only a newsstand buyer, I have not missed a single copy since 1926. At that time I was in Denver, Colorado. I was staying at a hotel that furnished literature for its patrons and in that way I became acquainted with Amazing Stories. Since then I have not missed a single copy no matter where I was.

Your method of preparing Amazing Stories for the public appeals to me, simply because it is "written so you can understand it."

Your material is splendid, type perfect, in fact it is complete except for one thing. Why not have two or three pages set aside for an open forum?

Both "Skylark Three" and Skylark of Space" are 100% stories. "Across the Void," also "Into the Void," were excellent, in that the sequel had the adventurous description of Interstellar space instead of the customary Interplanetary space alone. Yet it had a flaw; it was not technical enough.

I sincerely hope that you do not consider reprints. At least not in your regular magazine. Such a move, would result in a chaos of mix-ups for the reader who binds his magazines as I do and I think that those who do bind them will agree with me . .

Joseph W. Halase,
2620 Howard Street,
St. Louis, Missouri.

(We are rather glad to hear that you disapprove of reprints. We have on hand a quantity of original stories and we are desirous to give them room in our pages rather than go back to Jules Verne and his successors. We think that our writers produce works of more life and vigor from the standpoint of the present day at least. There seems in the old stories often to be a touch of dryness which, of course, it is desirable to avoid. You speak of an open forum. Do you not feel that the Discussions Column in which we are unmercifully treated by some and praised by others like yourself, in which we make no discrimination against unfavorable criticism, is an open forum? We are sorry we cannot print your appeal in the Discussions Column.

A DEVOTEE TO AMAZING STORIES

Editor, Amazing Stories:

To begin with I have been reading Amazing Stories since the first issue was put out in 1926 and I have a copy of every issue ever published, although I have never subscribed to it. It forms a valuable library and I while away many pleasant hours poring through it. This is the first time I have ever written you and for that reason would be pleased to see a letter of mine in the Discussion Department. I think this is one of the most interesting parts of the magazine.

As I have seen Amazing Stories grow up from infancy, I trust you won't feel slighted if I criticize it as it is today. The quality of paper is excellent, not too hard and glossy as to hurt the eyes nor too thick and bulky and cheap-looking as in some magazines. The drawing on the cover and the title are all right; I am against changing the latter. But I believe the cover would look better if the titles of the two or three stories that you print on it right over the picture were put on about one inch of white space at the bottom of the page. And instead of one artist drawing all the pictures I favor several, if only for variety, and for twenty-five cents I think we are entitled to more pictures. I have no kick to make on the stories themselves. I like the majority of them those I don't like probably most readers do and *vice versa*. Another feature I like is the editorial page. Its varied subjects written by a learned man make one think.

The following are what I think are the best twelve authors that have written for Amazing Stories and their best stories, in order: "The Facts in the Case of M. Valdemar," Edgar Allan Poe; "A Trip to the Center of the Earth," Jules Verne; "The War of the Worlds," H. G. Wells; "Vampires of the Desert," A. Hyatt Verrill; "The Moon Pool," A. Merritt; "The Land That Time Forgot," Edgar Rice Burroughs; "The Color Out of Space," H. P. Lovecraft; "The Drums of Tapajos," Capt. S. P. Meek; "A Columbus of Space," Garrett P. Serviss; "The Mad Planet," Murray Leinster; "Station X," G. McLeon Windsor; "The Skylark of Space," Edward Elmer Smith.

By the way, what has become of A. Hyatt Verrill? He is one author whose stories are all superb. Will close wishing you and our magazine many prosperous years.

Arthur Crumrin,
Chandlerville, Illinois

(Your description of your relations with Amazing Stories is quite delightful for us. It is a great thing to have a reader stick to you and appreciate your work. We can assure you that plenty of work is being done on Amazing Stories, it is no easy job to please so many thousands of readers. Your long association with our magazine makes you a specially authoritative critic. We have two artists working on the magazine and both excellent men. Your list of stories is quite illuminating. We have every reason to believe that we will be able to give you another of A. Hyatt Verrill's story soon.—EDITOR.)

ANOTHER SCOLDING LETTER

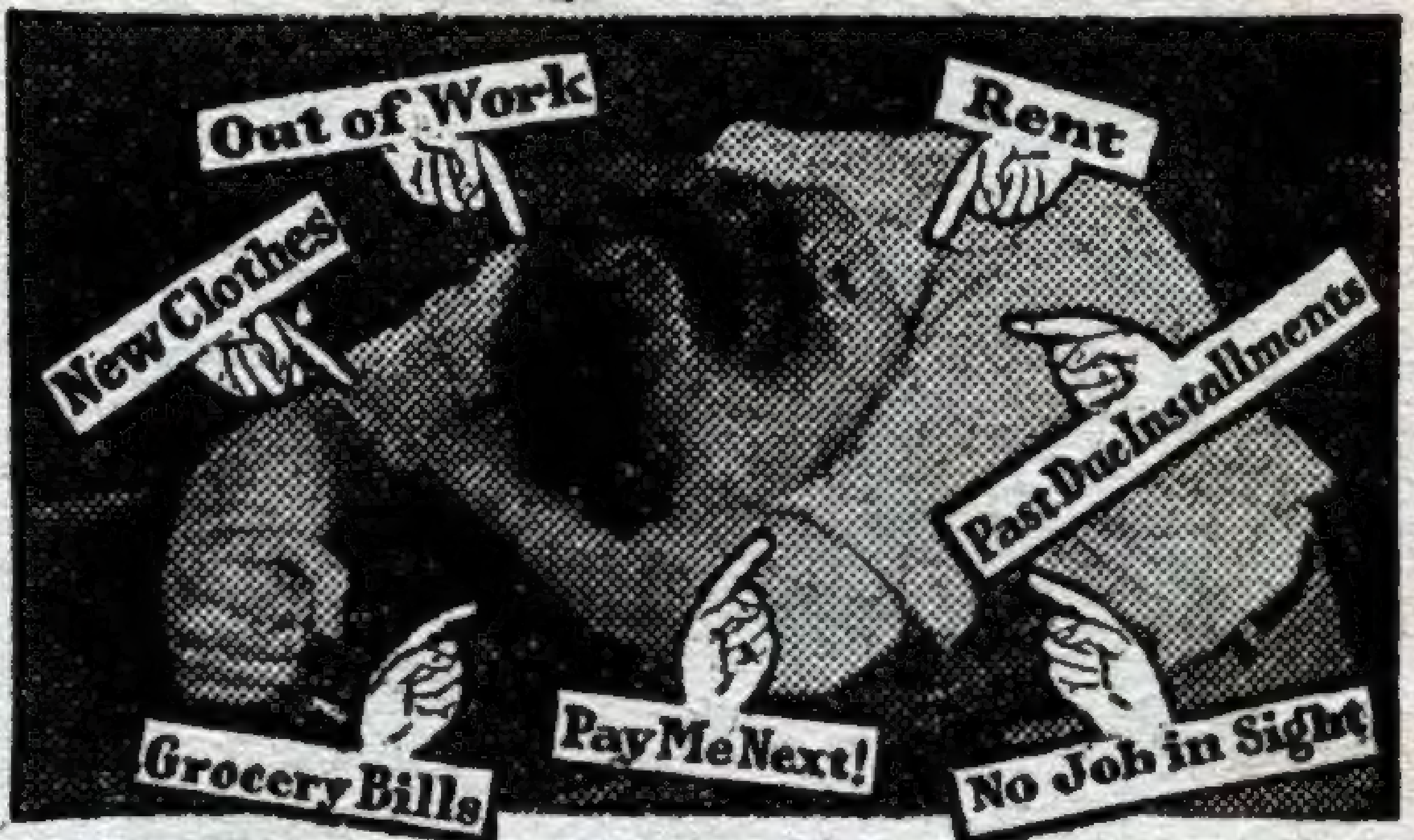
Editor, Amazing Stories:

For the past six years I have read your magazine. During this time the periodical kept up its extremely high standing of excellent illustrations and well-written stories. But—during the past year, your magazine had degenerated appreciably. Where are Paul's colorful pictures and the stories? Gone are the days of fanciful imaginative fantasms. Bright and rich in imagination. Let's have more "impossible" stories and less of hard fact. I think many of your readers agree with me. As to your authors, the only ones keeping up their standard are Dr. Keller, E. Hamilton, R. F. Starzl, Stanton A. Coblentz and J. W. Campbell ("bless his heart") not forgetting that new genius S. P. Miller.

John Michel,
1094 New York Avenue,
Brooklyn, N. Y.

(We feel that it is our duty to have our science correct and we are afraid that this leads to what you call "hard fact." We feel strongly that we already are giving too many fantastic and impossible tales. In the past, some of the most exciting of our stories have embodied fact, but a lot of them have departed from the barren path, as it may be termed, and are using fantasy. You could put in more names of good authors than appear in your letter.—EDITOR.)

Out of a Job?



Send me your name. I'll send new plan by which you can make up to

$15 a day on my "Chain Store System"

IF YOU are out of work or if your salary has been cut, if you are wondering where the money is coming from to pay your bills, then you're just the person I'm looking for.

Go to Work at Once!

I've got a good opening for you *right now*—a wonderful proposition that offers a chance to start right in making up to $15 a day—full time or spare time—in pleasant, dignified work that will be a revelation to you.

Send me your name so I can lay bona fide PROOF before you. I'll show you how Sol. Korenblit, of New York, made $110 in a *single week!* H. L. Lennon writes. "After leaving my old job, I went out Friday morning and made $39.63 in 7½ hours." Mrs. Eva McCutchen, of Oklahoma, quit a $10-a-week office job and made $26.55 profit the very first day. Mrs. Jewel Hackett, of Ohio, cleared $33 in 7 hours. I have hundreds of letters like this in my office. These big earnings show the wonderful possibilities. And right now, I'm ready to offer you an even better proposition!

30 Customers—15 Dollars a Day

You may wonder at making such big money as this even in the face of hard times. But my amazing new plan of operation, the Home "Chain Store" System, is proving a sensation. Housewives are wild about it, because it's just like bringing two "chain stores" right into the home. Saves time, trouble and money. You simply call on regular customers once every two weeks on appointment, set up my Drug "Chain Store" and my Grocery "Chain Store," write down the orders, handle the money and deliver the goods. You get a big part of every dollar we take in as your pay. And with an established Home Chain System, requiring only 30 calls a day, your pay can be as much as $15 a day, regular and steady.

Don't Send Money!

I don't want your money. All I want is a chance to lay the facts before you so you can decide for yourself. If you want a sure, steady chance to make $15 a day—with an old, reliable, million-dollar manufacturing company—then mail the coupon and see how easy it is to start on my Home "Chain Store" System. You invest no money in stock of goods. Earnings start at once. Don't miss this chance. It doesn't cost a penny to investigate. You can't lose by mailing the coupon, so do it today—right away—before some neighbor gets in ahead of you!

Albert Mills, Employment Mgr.
284 Monmouth Ave. Cincinnati, Ohio

Albert Mills, Employment Mgr.
284 Monmouth Ave., Cincinnati, Ohio.

Without cost or obligation to me, please rush facts about your new "Chain Store" System whereby I can make up to $15 a day starting at once.

Name ....
Address ....
City .... State..................
(*State whether Mr., Mrs. or Miss. Write plainly.*)

PHOTOGRAPHERS/
EARN REAL MONEY

Prepare NOW for a well-paid position or business of your own. Unlimited opportunities. Fascinating work. FREE BOOK tells how you can quickly qualify as

☐ Motion Picture Cameraman and Projectionist
☐ Still Photographer and Photo-Finisher

State which interests you. Write today
NEW YORK INSTITUTE OF PHOTOGRAPHY
10 W. 33rd St. (Dept. 103) New York, N. Y.

MONEY FOR YOU AT HOME

YOU can earn good money in spare time at home making display cards. No selling or canvassing. We instruct you, furnish complete outfit and supply you with work. Write to-day for free booklet.
The MENHENITT COMPANY Limited
248 Dominion Bldg., Toronto, Ont.

EXTRA LOVE & SEX NEWS LATE ★★★★ FINAL

READ BY OVER A MILLION MEN AND WOMEN. OVER 300,000 COPIES SOLD

DARING FACTS REVEALED
SEX SECRETS EXPOSED

Sensational New Book Thrills Public Everywhere

New York, N. Y.—At last the truth about **sex** and **love** can be known! Frank, fearless book sweeps country. Reveals **plain facts** about secret sins. Startling—dynamic—honest. Tells all **in plain** language.

Bitter tears and years of regret can never wipe out the Greatest Sin. Should **Woman** pay the terrible price for a short moment's happiness? Ruined homes—lovers and sweethearts parted—married life wrecked—divorce—scandal—sins of the parents inherited by their children—all the horrible results of **IGNORANCE** of the most important part of life—**SEX.**

A lifetime of experience—intimate facts of Sex **told freely** for the **first time.** If you don't think this is the greatest value you ever received for your money—the entire purchase price will be refunded. Face the **true Facts** about Sex and Life fearlessly—sincerely scientifically.

ACCLAIMED BY PUBLIC—
CENSORED BY IGNORANT!

2 FRANK & FEARLESS BOOKS IN ONE!
640 PAGES .... 98 PICTURES

WHAT EVERY MAN SHOULD KNOW

A FEW OF THE SUBJECTS COVERED

The Human Body
Venereal Diseases
Hygiene Precautions
How to Build Virility
How to Attract Women
Joys of Perfect Mating
The Sexual Embrace
How to Gain Greater Delight
Sex Health and Prevention
The Truth About Masturbation
Concerning Love
Etc. Etc.

WHAT EVERY WOMAN SHOULD KNOW

A FEW OF THE SUBJECTS COVERED

Guide to Love
The Meaning of Sex
The Dangers of Petting
How to Get Your Man
What to Allow a Lover to do
Essentials of Happy Marriage
Sex Attraction
Love Making and its Dangers
How to Pick a Husband
Intimate Personal Hygiene
Secrets of the Honeymoon
Birth Control Chart for Married Women

WAS $5.00 Now $2.98

NOTE—This book on Sex, Life and Health will not be sold to Minors—state your age when ordering!

FREE!

This instructive, outspoken book GIVEN WITHOUT COST, to all who order "The New Eugenics at $2.98. Learn all about the construction and functions of the human male and female body. Thrilling sex facts! FREE!

PHILOSOPHY OF LIFE

PIONEER PUBLISHING COMPANY, Dept. 27
110 West 40th Street, • New York, N. Y.

SEX IS NO SIN!

Banish false modesty! Learn the **truth** from this frank, fearless book, **"The New Eugenics."** Everything about sex explained in simple understandable language. No "Beating about the bush"—each fact told straight from the shoulder. Part II. "The Parents Medical Counselor"—no home should be without this valuable information—explains the human body—its functions, ills, remedies. Both parts of this 640-page book, fully illustrated, reduced to **$2.98,** formerly **$5.00.**

BANISH FEAR AND IGNORANCE!

Never before have the **facts of sex,** the revelations of sin, the marvels of the human body been discussed so frankly, honestly and fearlessly. **Everything** you want to know—and should know, is told plainly, in simple language, anyone can understand. **"THE NEW EUGENICS"** leaves out nothing—and tells **all** in plain words. No one should be without this valuable book.
There is no darkness but ignorance—why not banish it **forever. Face life fearlessly.** Learn all about twilight sleep, sex excesses, the crime of abortion, impotence and sex weakness, etc., etc. Take advantage of the **special offer.** Mail the coupon **at once!**

For a limited time only!

Pioneer Publishing Company
110 West 40th Street
Dept 27, New York, N. Y.

Kindly send me "The New Eugenics" (640 pages) in plain wrapper. I will pay the postman $2.98 (plus postage) on delivery. With the purchase of this book, also send me FREE of CHARGE your book, "The Philosophy of Life."

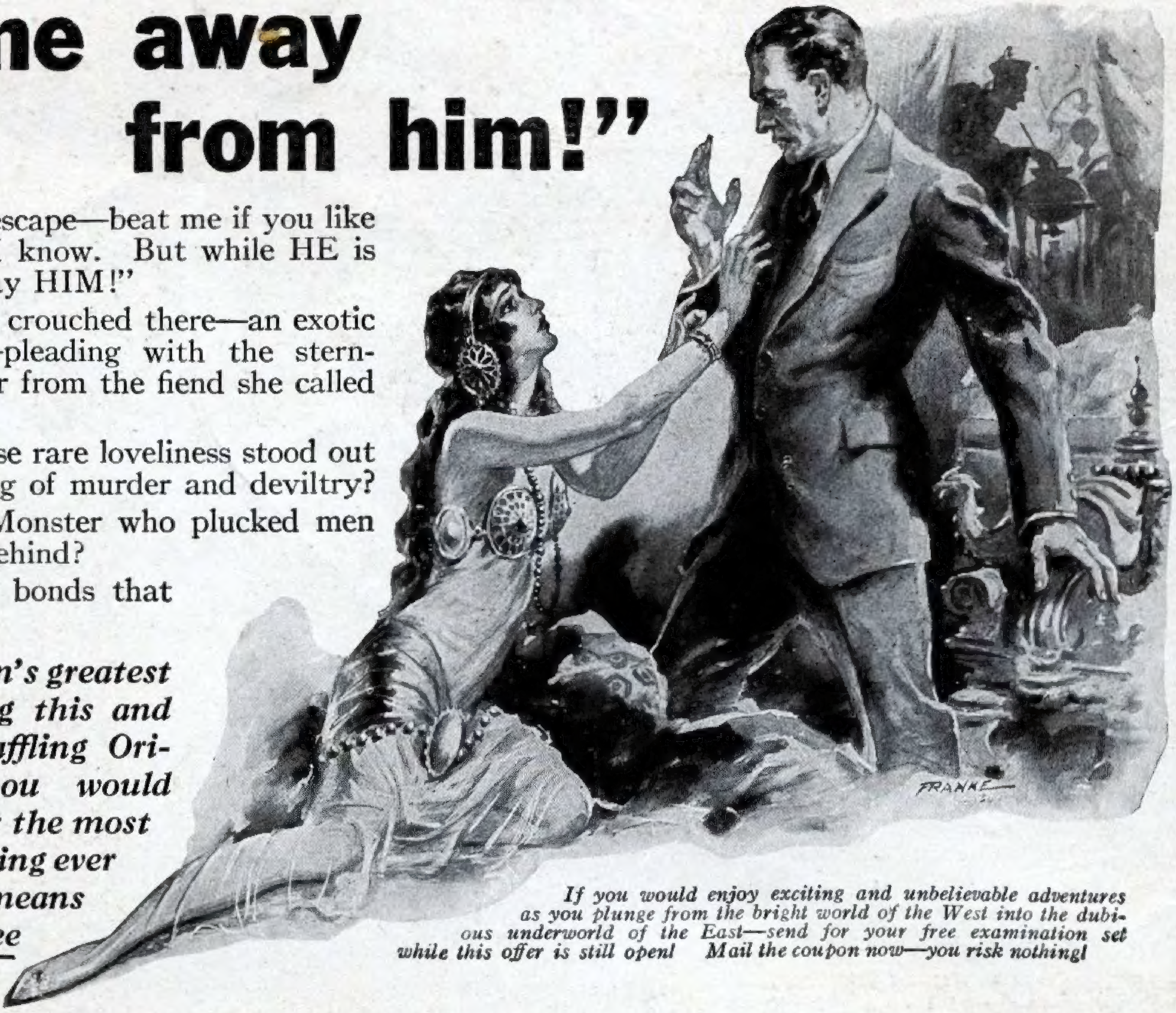
NAME..

ADDRESS......................................

AGE..

(Orders from Foreign Countries Must Be Accompanied by Express or Money Order for $3.45.)

"Take me away from him!"



"Lock me up so I cannot escape—beat me if you like —and I will tell you all I know. But while HE is my master I will not betray HIM!"

Terrified, trembling, she crouched there—an exotic vision from the Orient—pleading with the stern-faced detective to save her from the fiend she called "Master!"

Who was this girl—whose rare loveliness stood out so richly against its setting of murder and deviltry?

Who was this Yellow Monster who plucked men from life and left no clue behind?

What were the strange bonds that made her his slave?

If you would join London's greatest detectives in unwinding this and many other equally baffling Oriental Mysteries—if you would match your wits against the most diabolical Oriental cunning ever conceived—then by all means send at once for Your Free Examination Set of

If you would enjoy exciting and unbelievable adventures as you plunge from the bright world of the West into the dubious underworld of the East—send for your free examination set while this offer is still open! Mail the coupon now—you risk nothing!

MASTERPIECES OF ORIENTAL MYSTERY

11 Volumes of Matchless Thrills by SAX ROHMER

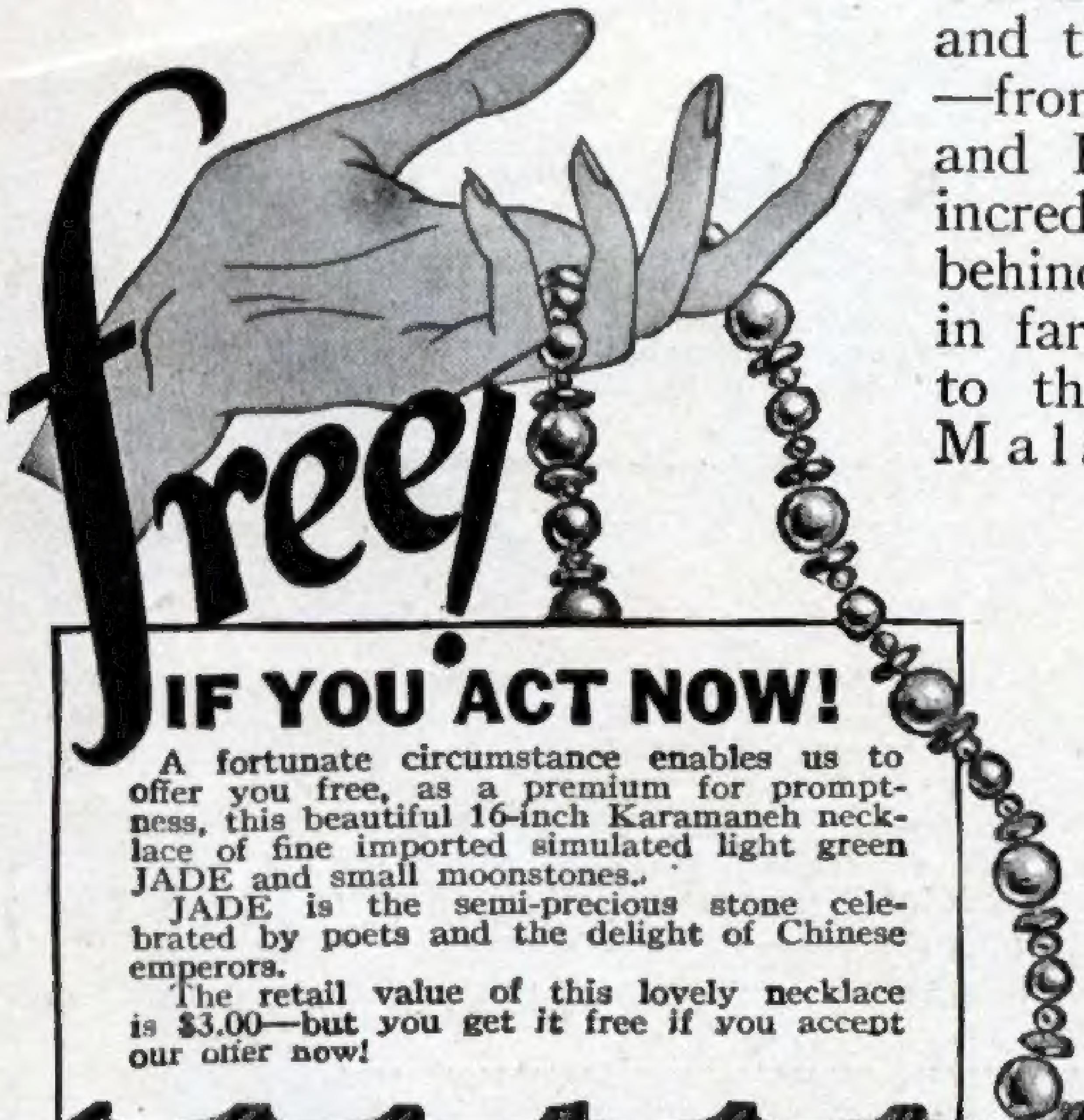
NO ORDINARY mystery stories are these, but the hidden secrets, mysteries and intrigues of the Orient itself!

Before your very eyes spreads a swiftly moving panorama that takes you breathless from the high places of society—from homes of refinement and luxury to sinister underworlds of London and the Far East —from Piccadilly and Broadway to incredible scenes behind idol temples in far off China—to the jungles of Malay, along strange paths to the very seat of Hindu sorcery.

THRILLS FROM COVER TO COVER

Be the first in your community to own these, the most wonderful Oriental mystery stories ever published—books that have sold by the hundred thousand at much higher prices—books you will enjoy reading over and over again. Handsomely bound in substantial cloth covers, a proud adornment for your table or shelf.

These are the sort of stories that famous statesmen, financiers and other great men read to help them relax—to forget their burdens. To read these absorbing tales of the mysterious East is to cast your worries into oblivion—to increase your efficiency.

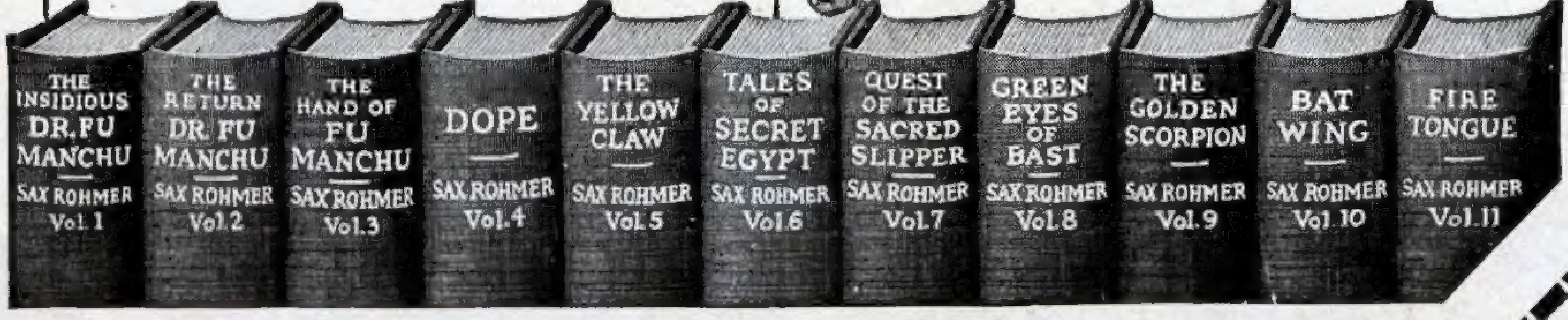


IF YOU ACT NOW!

A fortunate circumstance enables us to offer you free, as a premium for promptness, this beautiful 16-inch Karamaneh necklace of fine imported simulated light green JADE and small moonstones.

JADE is the semi-precious stone celebrated by poets and the delight of Chinese emperors.

The retail value of this lovely necklace is $3.00—but you get it free if you accept our offer now!


THE INSIDIOUS DR. FU MANCHU SAX ROHMER Vol. 1
THE RETURN DR. FU MANCHU SAX ROHMER Vol. 2
THE HAND OF FU MANCHU SAX ROHMER Vol. 3
DOPE SAX ROHMER Vol. 4
THE YELLOW CLAW SAX ROHMER Vol. 5
TALES OF SECRET EGYPT SAX ROHMER Vol. 6
QUEST OF THE SACRED SLIPPER SAX ROHMER Vol. 7
GREEN EYES OF BAST SAX ROHMER Vol. 8
THE GOLDEN SCORPION SAX ROHMER Vol. 9
BAT WING SAX ROHMER Vol. 10
FIRE TONGUE SAX ROHMER Vol. 11

PRICED FOR QUICK SALE

Cutting royalties to the bone and printing these volumes by the hundred thousand when paper was cheap, makes this low price possible. But the number is limited; so mail coupon today!

Complete Sets Free on Approval

You needn't send a cent. Simply mail the coupon and this amazing set will go to you immediately, all charges prepaid. If it fails to delight you, return it in ten days at our expense, and you owe us nothing.

McKinlay, Stone & Mackenzie, Dept. 169-7-32
New York City, N. Y.

MAIL COUPON TODAY. YOU RISK NOTHING

Dept.
169-7-32
McKINLAY, STONE & MACKENZIE
114 E. 16 St., N. Y.

Send me for free examination, charges prepaid, your set of Masterpieces of Oriental Mystery, in 11 handsome cloth volumes. If after 10 days, I am delighted, I will send you $1.00 promptly and $1.50 a month for only 9 months; when you receive my first payment you are to send me the Karamaneh necklace without extra cost. Otherwise, I will return the set in 10 days at your expense, the examination to cost me nothing.

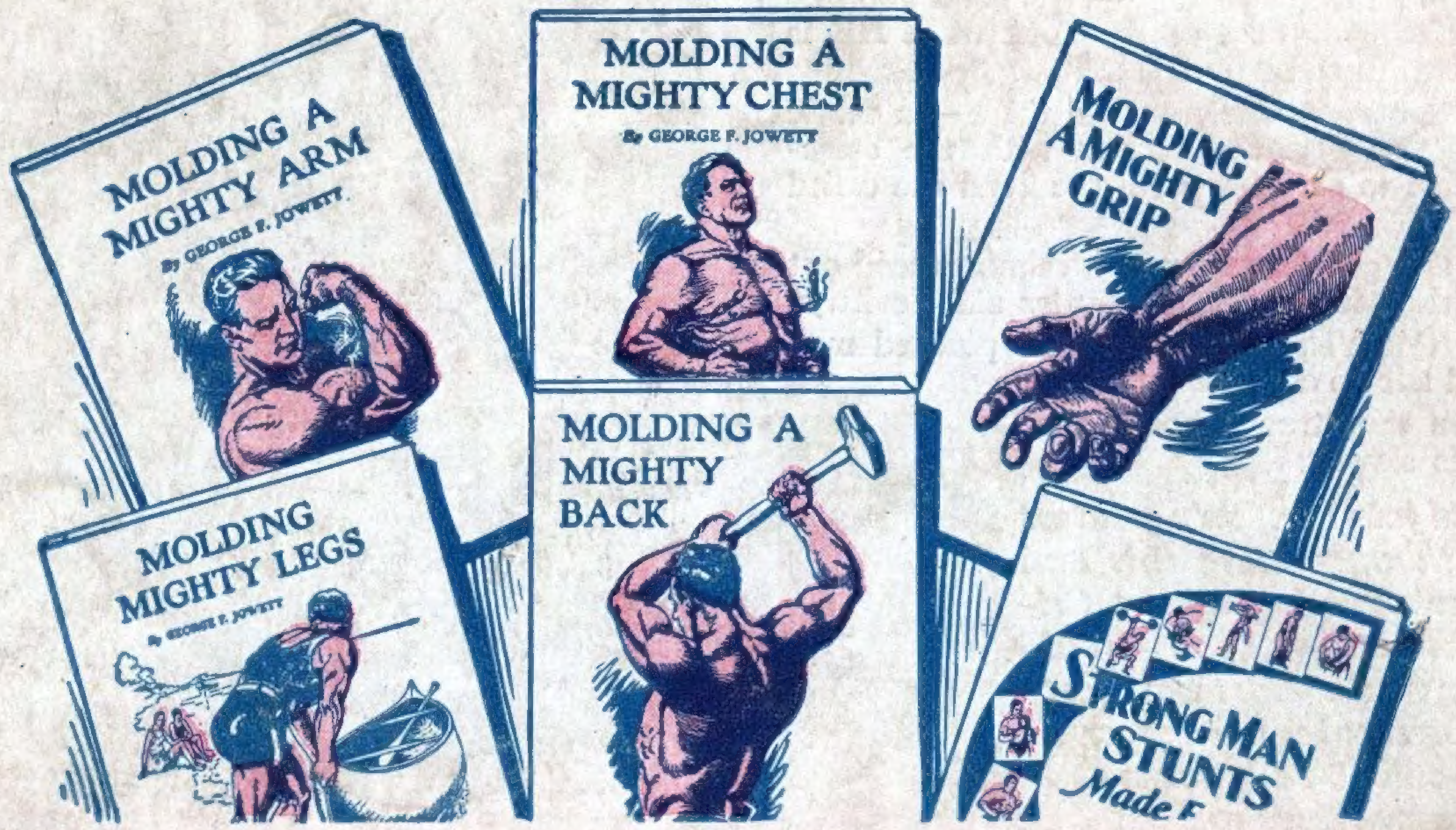
Name..

Street..

City.............................. State..............

Occupation..

Age: Over 21?.......... Under 21?.......... 5% off for cash.



Get This Strong Man's Library

25c
EACH POSTPAID

& Mold Mighty Muscles

ALL SIX
for $1.00
POSTPAID

You can be strong! This strong man's library is what every man needs—it is just the thing to show you how to develop every part of your body, inside and out—it is really a complete physical culture training course written in easy to understand language so that you will make quick progress by following the suggestions these precious volumes contain. Each book specializes on and deals with a different subject and each book is profusely illustrated and contains simplified diagrams showing you the short cut to muscular progress. The price on the set of 6 books is offered to you at the amazingly low cost of only $1.00. Any single volume only 25c. If you want to bubble over with health and strength—if you want to line that body of yours with real steel-like cables of muscles—sign your name and address to the coupon below and rush your order.

COMPLETE COURSES ON

Molding a Mighty Arm—Molding a Mighty Chest—Molding a Mighty Back—Molding Mighty Legs—Molding a Mighty Grip and Strong Man Stunts Made Easy

If you want an arm of might—if you want a 17 inch bicep and a 15 inch forearm and an 8" wrist, my book "Molding a Mighty Arm" is what you need. You will want a mighty chest—you will want 48 inches of colossal, muscular strength—you will want massive and powerful lifting force. My book "Molding a Mighty Chest" shows you how to quickly have and enjoy all of this. I will fill your back full of solid muscle so you will have backbone and strength—so you will be admired in ordinary street clothes, in a gym outfit or in your bathing suit—my book "Molding a Mighty Back" tells you how to achieve this part of your body perfection. In "Molding Mighty Legs," I give you leg exercise based entirely upon new principles. I give you legs for speed and endurance. Your character is revealed in your handshake. I give you a grip of steel which will permit you to easily and quickly become master of stunts done with the hands. My book, "Molding a Mighty Grip" will amaze you because of the valuable information it contains and the short cut method it reveals. Every strong man has his own special stunts. I reveal 12 sensational stunts to you. I make it easy for you to master them all in my book "Strong Man Stunts Made Easy." You will marvel at the simplicity and ease with which I show you how to master them.

All Written and Guaranteed

By Geo. F. Jowett (Champion of Champions)

George F. Jowett, Champion of Champions, is the author of all of these books. After you have read and practised what he tells you, you will be a two-fisted, fighting man with nerves of steel and muscles like iron. You will find this to be the greatest health investment you ever made in your life—that's why you should order the entire set of six at the bargain price of only $1.00.

Rush Coupon—Limited Offer!

This offer is made to help those who want to be strong and want to possess strength at a bargain price. The complete set of 6 books, all of which are profusely illustrated, will be sent to you by return prepaid mail for only $1.00. If you want to pick out any single book, you may do so and secure it for the small sum of 25c. For promptness I will include a copy of my book titled "The Thrill of Being Strong." This is crowded with photos of world's famous strong men and other valuable physical culture information which will interest you.

Sign your name and address to the coupon and rush it to me with your remittance—do it now, because this is a special limited offer.

George F. Jowett,
Jowett Inst. of Physical Culture,
Dept. 45Gb, 422 Poplar Street,
Scranton, Pa.

Your proposition looks good to me. Send by return prepaid mail the offer I have checked below and for which I am enclosing my remittance of $............

☐ All 6 volumes $1.00 postpaid.
☐ Molding a Mighty Arm 25c
☐ Molding a Mighty Back 25c
☐ Molding a Mighty Grip 25c
☐ Molding a Mighty Chest 25c
☐ Molding Mighty Legs 25c
☐ Strong Man Stunts Made Easy 25c

Name ....

Address ....